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ABSTRACT

Provided are appendices for a study which examined the relationship between graduate medical education (GME) and practice profiles in three specialties: family practice, psychiatry, and obstetrics/gynecology. Appendix A includes materials related to methodology of the study. Appendices B-D include supplementary materials for family practice, psychiatry, and obstetrics/gynecology findings respectively. These materials include: (1) Accreditation Council for Graduate Medical Education (ACGME) forms; (2) sample pages from the University of Southern California (USC) practice profile log diary; and (3) Graduate Medical Education National Advisory Committee (GMENAC) data. (JN)

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# LINKAGE BETWEEN GRADUATE MEDICAL EDUCATION TRAINING PRACTICE PROFILES IN PSYCHIATRY, OBSTETRICS/GYNECOLOGY, AND FAMILY PRACTICE

## APPENDICES

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# APPENDIX A

## METHODOLOGY OF THE STUDY

## APPENDIX A-1

## ACGME RESIDENCY ACCREDITATION DATA

Accreditation of residency training programs has been overseen since January 1, 1975 by the Liaison Committee on Graduate Medical Education (LCGME), a body administered by the American Medical Association and composed of representatives from the American Board of Medical Specialties, the American Hospital Association, the American Medical Association, the Association of American Medical Colleges, the Council of Medical Specialty Societies, the Federal Government, and the public.

This organization is charged with developing standards for residency training programs in conjunction with the individual residency review committees and with supervising the accreditation process as a whole. Through the process of accrediting and supervising residency training programs a great deal of information is obtained and maintained on the programs themselves as well as on the residents in them. During the accreditation review process program directors are required to complete an extensive questionnaire covering all aspects of the training program, including curriculum, training settings, teaching and research emphasis, and so forth. These questionnaires for Family Practice, Psychiatry, and OB/GYN are exhibited in Appendices B-1, C-1, and D-1. (Note, two questionnaires are given for OB/GYN in Appendix D-1 since the format of the questionnaire was changed midway through the period under study.)

These questionnaires contain a number of items of direct relevance to the study. The questionnaire for Psychiatry accreditation, for example, requires directors to indicate the types of patient problems (e.g., psychoses, neuroses, mental retardation, alcoholism) encountered by residents, the research opportunities available for residents, and the extent to which residents engage in teaching. The OB/GYN questionnaire asks for the types of inpatient and outpatient services through which residents are rotated. Also elicited is information on various conditions and procedures encountered in the program (e.g., number of radical pelvic procedures for malignant disease), as well as

the types of experiences usually achieved by all residents by the completion of a program (e.g., incubation of new born, management of a pregnant diabetic). Thus, there is potentially a great deal of data available that may be of use in characterizing residency training along the dimensions of interest in the proposed study. Because the ACGME data base represents the entire population of residency programs it acts as a unique source of complete information for this study.

Because the questionnaire data is collected by the ACGME from individual residency programs under confidentiality assurances, the data are not publicly available. Although ACGME permission for use of its data was solicited and obtained, it was necessary to receive clearance from each of the individual residency programs before the ACGME would release any of the data forms. The contacting of program directors therefore comprised a major portion of the early project's activities. These efforts and the impact of non-participation on the sampling scheme are described in further detail below.

One potential limitation of the ACGME data base recognized early in the study is that it provides only global measures of program characteristics to describe residency training. Thus, although the USC study provides data on a representative sample of physicians, corresponding data covering a representative sample of residents is lacking (except for the subsample in the USC study itself). As a result -- although aggregate indices derived over the sample of physicians are likely to act as a good estimate of their population parameters, simple averages of residency program characteristics may not provide good estimates of the training received by the population of residents (especially since the programs vary greatly in size and curricular emphasis). A simple solution is to weight program-level data by the number of residents in each program, yielding the same aggregate measure of GME experience that would have been obtained had residents been sampled directly.

Budgetary constraints, however, did not allow for the acquisition of data for the entire population of programs in the three specialties, making it necessary to take a sample of residency programs. To make valid comparisons, it was important to have aggregate measures of residency training that were representative of the population of residents. This required a rigorous

sampling plan.

## 1. Sampling of Residency Training Programs

The actual objective of the sampling plan was to select 100 programs in each specialty in such a way as to obtain, in proxy, an unbiased representation of the population of residents in each specialty. One approach that was considered entailed randomly sampling residency programs without regard to size and subsequently weighting by program size when calculating statistics. Another approach involved drawing a sample in which programs are selected according to their size. For three reasons, we were motivated to implement the latter approach.

First, since program characteristics are likely to vary according to program size, it was felt that program size should be a consideration in sampling. Second, there are fewer large programs in the population than there are small and medium-sized programs, but at the same time those large programs train a disproportionate percentage of the residents, providing each field with a large percentage of its physicians. To ensure a representative sample of large programs it was therefore necessary to oversample them. This was especially important since there may be reason to believe that large programs are characterized by greater variability than are small programs. Sampling with probability proportional to size reduces some of the sampling variability associated with sampling units of widely varying sizes. Third, sampling according to program size implicitly weights by size a priori. This simplifies the analyses since a simple average of program characteristics under such a sampling scheme provides a better estimate of residency training for the population of residents than does a similar weighted average of programs sampled at random.

Therefore the method chosen was to sample programs with probability proportional to size (number of residents per program). The actual approach was implemented in two stages. In the first, certain programs in each specialty were selected into the sample with certainty (i.e., probability equal to one). This small certainty sample consisted of residency programs that were so large (i.e., they represented so many residents) that they had to be included in the

sample. A specific size criterion for defining this sample was derived by dividing N, the total number of residents in each specialty, by np, the number of residency programs to be sampled in each specialty (here, np = 100). Programs with more than N/np residents were selected into the sample with certainty. In the second stage, the remaining programs were selected with probability proportional to size. To do this, programs within each specialty were sorted by geographic region and program size (the dimensions of stratification) and programs were selected so that each N-N*/np-n*pth resident was represented (where N* equals the number of residents in the programs selected with certainty, and n*p equals the number of certainty programs.

This sampling strategy was used to draw a primary sample of 100 residency programs within each specialty. However, anticipating less than a 100% participation rate, a list of potential replacement programs was needed. In general, replacements can either be selected probabilistically or by matching according to the characteristics of the primary sampling members they are replacing. The latter selection method was considered appropriate for this study. In theory, replacements are selected only after non-response is determined for a member of the primary sample. However, in this study, some of the non-sampled programs could be identified as having characteristics (region and size) that matched those of several primary sampled programs at the same time. That is, each could act as a replacement for any of several sampled programs. To increase response to the initial mailout and to reduce the requirement for subsequent mailings, the decision was made to include this smaller replacement sample with the primary sample for the initial mail-out in each specialty. In that way, if a primary sampled program declined involvement in the study, a replacement may already have been available. In total 125 residency programs in Family Practice, 141 programs in Obstetrics/Gynecology, and 137 programs in General Psychiatry were included in the initial mail-out.

After the intital mailing, residency programs were given two weeks in which to return their signed release forms. At that point non-respondents were contacted by phone and were urged to join the study. After an additional week, replacements were selected for those programs still failing to respond and having no available replacements. A second mailing, involving this new sample of replacements, then proceeded. The few remaining non-respondents from this

TABLE A

Distribution of Sampled Residency Training Programs in Family Practice, OB/GYN, and Psychiatry by Size of Program and Region

REGION

FP: COUNT (ROW %) (COLUMN %)

| | North East | North Central | South | West | |
|---|---|---|---|---|---|
| Small (1-15) | 5 (25) (27.8) | 8 (40) (25.8) | 5 (25) (14.3) | 2 (10) (12.5) | 20 |
| Medium (16-30) | 10 (17.5) (55.6) | 18 (31.6) (58.1) | 18 (31.6) (51.4) | 11 (19.3) (68.8) | 57 |
| Large (31+) | 3 (13) (16.7) | 5 (21.7) (16.1) | 12 (52.2) (34.3) | 3 (13) (18.8) | 23 |
| | 18 | 31 | 35 | 16 | 100 |

OB/GYN: COUNT (ROW %) (COLUMN %)

| | | | | | |
|---|---|---|---|---|---|
| Small (1-15) | 10 (29.4) (31) | 10 (29.4) (41.7) | 9 (26.5) (28.1) | 5 (14.7) (31.3) | 34 |
| Medium (16-30) | 18 (34) (56.3) | 12 (22.6) (50) | 14 (26.4) (43.8) | 9 (17) (56.3) | 53 |
| Large (31+) | 4 (26.5) (12.5) | 2 (11.8) (8.3) | 9 (52.9) (28.1) | 2 (11.8) (12.5) | 17 |
| | 32 | 24 | 32 | 16 | 104 |

PSYCHI-: COUNT (ROW %) (COLUMN %)

| | | | | | |
|---|---|---|---|---|---|
| Small (1-15) | 4 (36.4) (10.8) | 3 (27.3) (14.3) | 3 (27.3) (11.5) | 1 (9.1) (5.9) | 11 |
| Medium (16-30) | 17 (34) (45.9) | 12 (24) (57.1) | 13 (26) (50) | 8 (16) (47.1) | 50 |
| Large (31+) | 16 (40) (43.2) | 6 (15) (28.6) | 10 (25) (38.5) | 8 (20) (47.1) | 40 |
| | 37 | 21 | 26 | 17 | 101 |

TABLE B
Approximate Distribution of Residents
Family Practice, OB/GYN, and Psychiatry
by Size of Program and Region

REGION

| | COUNT (ROW %) (COLUMN %) | North East | North Central | South | West | |
|---|---|---|---|---|---|---|
| FP: | Small | 353 (22.7) (26.8) | 635 (40.9) (28.3) | 353 (22.7) (14.4) | 213 (13.7) (14.6) | 1554 (20.8) |
| | Medium | 787 (18.1) (59.8) | 1342 (30.8) (59.9) | 1334 (30.6) (54.4) | 894 (20.5) (61.1) | 4357 (58.3) |
| | Large | 175 (11.2) (13.3) | 265 (17) (11.8) | 765 (49) (31.2) | 355 (22.8) (24.3) | 1560 (20.9) |
| | | 1315 (17.6) | 2242 (30) | 2452 (32.8) | 1462 (19.6) | |

| | COUNT (ROW %) (COLUMN %) | | | | | |
|---|---|---|---|---|---|---|
| OB/GYN: | Small | 331 (24.9) (26.6) | 404 (30.4) (38.3) | 375 (28.2) (25.6) | 219 (16.5) (30.5) | 1329 (29.7) |
| | Medium | 738 (30.2) (59.3) | 581 (23.8) (55.1) | 679 (27.8) (46.4) | 443 (18.1) (61.8) | 2441 (54.5) |
| | Large | 175 (24.6) (14.1) | 70 (9.9) (6.6) | 410 (57.7) (2.8) | 55 (7.7) (7.7) | 710 (15.8) |
| | | 1244 (27.8) | 1055 (23.5) | 1464 (32.7) | 717 (16) | |

| | COUNT (ROW %) (COLUMN %) | | | | | |
|---|---|---|---|---|---|---|
| PSYCHI-: | Small | 186 (39.3) (10.5) | 111 (23.4) (10.4) | 115 (24.3) (8.8) | 443 (13.1) (7.5) | 474 (9.5) |
| | Medium | 783 (31.5) (44.0) | 586 (23.6) (54.9) | 732 (29.4) (56) | 387 (15.6) (46.7) | 2488 (49.9) |
| | Large | 810 (40.1) (45.5) | 370 (18.3) (34.7) | 460 (22.8) (35.2) | 380 (18.8) (45.8) | 2020 (40.5) |
| | | 1779 (35.7) | 1067 (21.4) | 1307 (26.2) | 829 (16.6) | 4982 |

sample were contacted by phone, and thus the entire sample was formed. Because of a few late responses in OB/GYN and Psychiatry, those samples exceeded 100 (104 and 101 respectively).

In summary, the population of residency programs in each specialty was stratified by region, and programs were sampled from within each region with probability proportional to size. This approach to sampling programs provided a representative self-weighting sample of residents. The final sample is broken out by region and size strata in Table A and can be compared to the same type of breakdown for the resident population presented in Table B. A comparison of Tables A and B shows that the distribution of residents in sampled residency programs closely matches the distribution of all residents in the three specialties.

## 2. Abstracting of ACGME Data

Because some of the data on the obtained ACGME questionnaires was in narrative form, and because many of the remaining data items needed to be coded and quantified for analyses, an important aspect of the data collection effort was the abstracting, condensing, and coding of ACGME data. The emphasis in this effort was placed on identifying items that would provide information bearing on the study's four primary research questions. Developing a system for abstracting key information from narrative items was the most difficult task in the abstracting effort. Project staff reviewed approximately 20 forms for each specialty, identifying items that were consistently responded to and that contained useful program descriptions. Sample responses and key diagnoses or content areas that were referenced in those responses were compiled and examined to identify categorization schemes that captured most of the variability and meaning of the data. After decisions were made about these encoding schemes for narrative items, formats had to be developed for each item to enable efficient abstracting and coding. These formatted items then had to be combined graphically to create abstracting forms to facilitate the recording of information and the key-punching of data items.

Three full-time staff members were assigned the responsibility of abstracting from ACGME questionnaires. To ensure high reliability of the abstracting process a lengthy training session was provided with sample questionnaire items. In addition, at several points in the abstracting process reliability checks were conducted. The obtained reliabilities were generally quite high, and items showing disagreement were thoroughly discussed until consensus was reached. As a result, the abstracted and key-entered data from the ACGME forms was characterized by a high degree of reliability. In this form, the data items needed only to be combined and encoded in such a manner as to facilitate the comparative analyses. These tasks will be described in further detail in a later section.

## APPENDIX A-2

## USC PRACTICE PROFILE DATA

Most sources of data covering medical activities in the United States use the patient or episode as the sampling unit, rather than the physician. These include many of the data bases used in developing the GMENAC model, such as the Health Interview Survey (HIS), the Hospital Discharge Survey (HDS), that performed by the Commission on Professional Health Activities (CPHA), as well as others such as Medicare, Medicaid and the PHDDS data collected by Professional Standards Review Organizations. Generating profiles on physicians by specialty would be prohibitive since it would require identification of individual physicians and linkage with other sources of data on physicians, such as that contained on the AMA Masterfile. In addition, complex assumptions would be required to generate statistics describing specialty profiles from this data. As a result, analysis of current practice patterns relied primarily on data collected in the USC Practice Profile Study. This study is the only nationally representative study for which the physician is the sampling unit and which samples patient encounters across all practice settings.[1] A brief description of the study follows.

In 1975, the University of Southern California, Division of Research in Medical Education (USC/DRME) began a series of studies of the professional activities and patient care characteristics of physicians in twenty-four medical and surgical specialties in the United States. This project, with Robert C. Mendenhall as the principal investigator, was initiated with funding from the Robert Wood Johnson Foundation, although additional funding was obtained from the Bureau of Health Manpower/HRA. Data collection was initiated in February

[1]The National Ambulatory Care Survey (NAMCS), conducted on a yearly basis from 1973 to 1979, is alos physician-based, but covers only the office-visits of office-based physicians and is, therefore, lacking the representativeness required in the present study.

1976 and continued through July 1978. A total of 10,372 physicians participated in the series of surveys. These physicians recorded data on a total of 367,901 direct (face-to-face) encounters with their patients over a three-day period for each physician. The target population for the surveys consisted of physicians whose were listed on the American Medical Association's (AMA) Masterfile of Physicians as having indicated one of the 24 sampled specialties as their primary specialty. This population excluded (a) federal physicians, (b) inactive physicians, (c) interns (first-year residents), and (d) physicians whose practice arrangements were unknown due to missing data.

Response rates ranged from 34% for general surgery to 82% for endocrinology, for an overall response rate of 55%. The reliability of the data was evaluated by an independent audit of physicians and their practices (Perrin et al., 1978). This evaluation involved interviews with 374 physicians in general practice, family practice, and pediatrics who had participated in the USC survey. The results of the study indicated an acceptable level of reliability for most of the log diary variables, particularly those found in the patient encounter section.

The purpose of the series of surveys was to collect base-line data describing the professional activities of physicians in the United States. Attention was focused on the amount and type of patient care and services provided to patients as well as how these variables might be affected by specialty, practice arrangement, board certification, and geographic location. Because of their comprehensiveness, the data are capable of providing an in-depth examination of many previously unavailable aspects of physician-provided health care. To date, the data have been used to contrast the various specialties in terms of their delivery of primary care, to provide broad-based clinical care profiles in various specialties, to investigate factors which affect physician productivity, to examine specialty differences in the treatment of disease, and to examine the care given to specific patient subpopulations.

The survey instrument incorporated three major parts, one of which was further divided into four sections:

Week's Practice Summary

Log Diary
- Activity Overview
- Patient Encounters - Telephone
- Patient Encounters - Outpatient and Inpatient
- Teaching and Research

Questionnaire

Each specialty was assigned a study week (Sunday through Saturday) during which physicians from that specialty were to complete the instrument. Part 1 was to be completed for the entire week. Part 2 was to be filled out for three days of the study week. (Half of the sample in each specialty was assigned Monday through Wednesday and the other half, Thursday through Saturday; these assignments were made on a random basis.) Part 3 could be completed at any time.

Each Section of the diary will be described briefly below:

- Week's Practice Summary: This section provided an overview of the physicians's workload during an entire week (Sunday through Saturday) delineated by day and type of activity. These data include tallies of telephone contacts, direct patient contacts, and total hours worked.

- Activity Overview: This section was designed to obtain data about each physician's allocation of time within a range of professional activities. Respondents were required to record all of their activities for a seventy-two hour period. For each fifteen minute interval during the recording period, the physician selected a code number for the activity that best characterized that interval. Codes were selected from a given list of twenty-seven activities that could be conducted in various clinical settings and included such activities as patient care, teaching, research, administration+, and travel.

- Patient Encounters -- Telephone: This section collected data on telephone conversations between physicians and patients regarding health problems. Information was obtained regarding the time allocated to each phone call, the age and sex of the patient, the nature of the problem, the action taken and the outcome of each telephone contact.

- Patient Encounters -- Outpatient and Inpatient: Completion of this section entailed recording in considerable detail each face-to-face patient contact during the three-day period. For each encounter, information was obtained regarding the date and duration of the transaction; patient and encounter characteristics; patient's problem; diagnostic and therapeutic services rendered; and encounter complexity, severity and urgency, as well as recommended follow-up. The data for each patient contact were recorded using predetermined numerical codes, except for the patient's diagnosis, which required narrative description.

- Teaching and Research: This section of a log-diary collected data on the type, characteristics and volume of teaching and research activities in which the physicians were engaged during the three recording days.

- Questionnaire: In this part of the instrument, information was obtained about each physician's background, education, current practice or employment arrangement (including type of setting, staffing, billing), the representative patient load during the assigned study week and similar items.

In the USC Study, Family Practice and General Practice physicians were sampled in separate surveys. Only the Family Practice sample was included in the present study. A total of 683 FP physicians participated in the USC Study, representing a response rate of 44%. Of these 683 physicians, 677 were used in the current study (the data for 6 physicians were not retrievable from the USC data tapes), 606 of whom were physicians who had completed residency and 71 of whom were still in residency training. This subsample of residents can be directly compared to the USC physician data, allowing for supplementation of the ACGME resident data. The USC Study of Family Practice physicians consists of data on a total of 34,125 direct patient encounters over the 677 physicians used in this study. Of these encounters, 2,318 involved residents (an average of 33 encounters per resident in the 3-day period), and 32,807 involved practicing physicians (52 encounters per physician).

In its survey of Psychiatry physicians, the USC Study focused on General Psychiatry only, excluding Child Psychiatry. A total of 697 psychiatrists was sampled (a 50% response rate), all of whom were used in the current study. Of

this total sample, 645 had completed residency, while 52 were still in residency training. A total of 12,045 direct patient encounters were covered, of which 643 involved residents (12 per resident) and 11,402 involved practicing physicians (18 per physician).

In OB/GYN, the USC sample excluded physicians whose specialties are pure Obstetrics or pure Gynecology. A total of 883 physicians were sampled (for a response rate of 56%). This total represents a sample of 804 practicing physicians and 79 residents. In total, 34,614 direct patient encounters were covered, 1,926 of which involved residents (24 encounters per resident) and 33,688 of which involved practicing physicians (42 encounters per physician).

## 1. Selecting Physicians for the Analysis

Whereas the USC Practice Study Reports include all sampled physicians in the tabulation of their data, this was not necessarily the optimum approach in the proposed study. First, physicians were included in the USC sample according to self-designated specialty, so that not all the physicians in the sample actually received residency training in the designated specialty. In order that comparisons between training and practice apply to comparable populations it was considered desirable to restrict the sample of practicing physicians to those with residency training in a specialty. However, the only way of identifying such physicans in the USC data base was by means of a questionnaire item asking physicians to name the specialty areas in which they had completed residency training requirements for board certification (Item A.3.b.). This item provides no way of distinguishing missing data from a negative response and, in fact, an examination of responses showed that only 60% to 75% of the physicians in each specialty sample indicated that they had completed residency training requirements in that specialty, a number which was considered abnormally low and attributable to the large amount of missing data for this item. Of those who filled out the item at all, 85% in FP, 95% in OB/GYN and 97% in Psychiatry noted their training to be in the given specialty, indicating that the number of physicians having received specialty training was much higher than apparent in the data. Restricting the analyses to only physicians who responded positively to this item, therefore greatly reduces the sample size and decreases the power of statistical tests. In addition, this approach is not entirely appropriate

for the younger specialty of Family Practice to which physicians not formally trained in the specialty were admitted after meeting other specific criteria.

In order to select as pure a sample as possible, the alternative approach of selecting only board-certified physicians was examined. Again sample size was reduced (32% for OB/GYN, 48% for Psychiatry, and 43% for Family Practice.) Given the special circumstances of Family Practice, the strategy of defining Family Physicians as either diplomates of the American Board of Family Practice or as active members of the American Academy of Family Physicians was examined. This approach reduced sample size by approximately 20%.

Since all these approaches reduced the power of the statistical analyses considerably, a number of subanalyses were performed to determine whether inherent differences among subpopulations warranted exclusion of large portions of the sample. The following variables (which figured prominently in the substantive analyses of the study) were examined: total time spent in inpatient and outpatient settings (from the Activity Overview), inpatients and outpatients seen by the physician in a week and total patients seen only by other staff (from the Week's Practice Summary), total time spent in teaching, research or administrative activities and time spent in direct patient care activities (from the Activity Overview), and the distribution of patient encounters in terms of focus, etiology and major ICDA classification of the patient's primary problem.

Results are presented in Table C for Family Practice, Table D for Psychiatry, and Table E for Obstetrics/Gynecology. In all of the analyses the number of statistically significant differences (at the $p<.05$ level) between self-designated physicians and those with residency training and/or board certification in a specialty (and for Family Practice, active members of the AAFP) was exactly equal to what would be expected by chance. Therefore, in order to preserve sample size and increase the stability of estimates, the decision was made to include all of the physicians in the USC sample in the analyses.

In addition to these issues, decisions were made to include the few foreign medical graduates and the few physicians not directly engaged in the care of patients (the latter in order to obtain accurate estimates of the practice time

TABLE C

FAMILY PRACTICE

COMPARISON OF (1) SELF-DESIGNATED PHYSICIANS
(2) RESIDENCY TRAINED AND/OR BOARD CERTIFIED PHYSICIANS
AND (3) ACTIVE MEMBERS OF THE AAFP

TABLE C

| VARIABLE | ACTIVE MEMBER OF AAFP | BOARD-CERTIFIED IN FP ONLY | SELF-DESIGNATED | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|---|
| | n=496 | n=110 | n=71 | |
| hrs per day in inpatient setting[1] | 1.2 | 1.1 | .7 | * |
| hrs per day in outpatient setting[1] | 3.3 | 3.5 | 3.1 | ns |
| hrs per day in teaching, research & administration[1] | .9 | 1.2 | .7 | ns |
| hrs per day in direct patient care[1] | 4.9 | 5.0 | 4.2 | ns |
| | n=355 | n=88 | n=53 | |
| # inpatients seen weekly | 42.3 | 26.6 | 25.0 | ** |
| # outpatients seen weekly | 115.4 | 90.1 | 84.2 | * |
| # weekly patients seen by other staff | 29.1 | 15.9 | 36.1 | ns |
| %PATIENTS WITH A FOCUS OF: | n=354 | n=90 | n=51 | |
| well patient | 9.2 | 9.9 | 9.9 | ns |
| skin, including nails, hair | 7.6 | 7.7 | 9.1 | ns |
| head, neck | 1.9 | 1.7 | 2.2 | ns |
| eyes | 1.1 | .8 | .7 | ns |
| ears | 2.2 | 3.2 | 1.7 | ns |
| nose | .7 | .5 | 1.1 | * |
| mouth/throat | 4.0 | 3.2 | 3.2 | ns |
| breasts | .6 | .7 | .7 | ns |
| respiratory-upper | 7.4 | 6.3 | 6.5 | ns |
| respiratory-lower | 6.6 | 5.7 | 5.1 | ns |
| circulatory-heart | 6.2 | 5.6 | 6.6 | ns |
| circulatory-other | 5.9 | 5.0 | 5.0 | ns |

TABLE C Continued

| VARIABLE | ACTIVE MEMBER OF AAFP n=353 | BOARD-CERTIFIED IN FP ONLY n=90 | SELF-DESIGNATED n=51 | SIGNIFICANT DIFFERENCES |
|---|---|---|---|---|
| infection/post-infection | 24.9 | 24.3 | 24.8 | ns |
| inflammation | 5.7 | 5.6 | 5.1 | ns |
| hemorraghing/bleeding | 1.4 | 1.3 | 1.3 | ns |
| occlusion | 2.1 | 3.2 | 1.1 | * |
| ulceration | .8 | .7 | 1.1 | ns |
| immunologic | .4 | .6 | .3 | ns |
| allergic | 3.1 | 2.7 | 3.3 | ns |
| metabolic | 2.9 | 2.7 | 2.9 | ns |
| deficiencies | .9 | .5 | .6 | ns |
| nutrition, including weight | 1.1 | 2.0 | 1.3 | ns |
| congenital | .5 | .4 | .8 | ns |
| degeneration, including aging | 7.0 | 5.0 | 8.5 | ns |
| hypertension | 5.0 | 3.3 | 5.6 | * |
| neoplasm-begign | 1.0 | 1.2 | 1.8 | ns |
| neoplasm-malignant, variable description | 1.7 | 1.4 | 1.0 | ns |
| neoplasm-undetermined | .3 | .6 | .6 | ns |
| intoxication/addiction: alcohol | .5 | .5 | .4 | ns |
| intoxication/addiction: drug | .2 | .2 | .3 | ns |
| intoxication/addiction: poison | .0 | .0 | .0 | ns |
| intoxication/addiction: tobacco | .2 | .4 | .3 | ns |
| trauma:burn | .3 | .3 | .3 | ns |
| trauma:concussion | .4 | .3 | .5 | ns |
| trauma:contusion | 2.5 | 2.2 | 2.6 | ns |

TABLE C - Continued

| VARIABLE | ACTIVE MEMBER OF AAFP | BOARD-CERTIFIED IN FP ONLY | SELF-DESIGNATED | SIGNIFICANT DIFFERENCES |
|---|---|---|---|---|
| | n=354 | n=90 | n=71 | |
| blood-lymphatics | 1.0 | 1.0 | .6 | ns |
| liver, gallbladder variable description | 1.2 | .8 | 1.0 | ns |
| gastrointestinal-other | 6.7 | 7.0 | 6.1 | ns |
| arthritis/rheumatism | 2.1 | 2.0 | 2.3 | ns |
| muscular-other | 3.7 | 3.5 | 3.7 | ns |
| skeletal-other | 7.1 | 5.7 | 6.7 | ns |
| endocrine | 2.9 | 4.2 | 3.0 | ns |
| neurological | 2.6 | 3.2 | 3.6 | ns |
| emotional | 3.9 | 4.5 | 3.5 | ns |
| renal | .6 | .5 | .7 | ns |
| urinary other | 2.3 | 2.1 | 2.0 | ns |
| genital-male | 1.2 | 1.8 | 1.1 | ns |
| gynecological | 4.0 | 5.2 | 5.8 | ns |
| obstetrical-antepartum | 2.6 | 4.0 | 2.5 | ns |
| obstetrical-intrapartum | .8 | .5 | .5 | ns |
| obstetrical-postpartum | 1.1 | 1.0 | .5 | ns |
| multi-system - variable description | 2.8 | 2.7 | 4.5 | * |
| %PATIENTS WITH AN ETIOLOGY OF: | n=353 | n=90 | n=51 | |
| none | 7.9 | 8.6 | 6.6 | ns |
| health assessment | 6.5 | 8.3 | 7.6 | ns |
| developmental | 1.1 | 1.0 | 1.0 | ns |
| pre/post-surgical | 2.0 | 1.3 | 2.3 | ns |
| iatrogenic | .8 | 1.0 | .4 | * |
| idiopathic (based on work-up)variable description | 4.1 | 5.3 | 4.0 | ns |

TABLE C - Continued

| VARIABLE | ACTIVE MEMBER OF AAFP n=353 | BOARD-CERTIFIED IN FP ONLY n=90 | SELF-DESIGNATED n=51 | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|---|
| trauma:dislocation/ fracture | 2.4 | 2.3 | 1.5 | ns |
| trauma:foreign body | .6 | .4 | .4 | ns |
| trauma:laceration | 2.0 | 1.8 | 1.5 | ns |
| trauma:sprain | 3.4 | 2.4 | 3.9 | * |
| psycho/social:general adjustment | .7 | 1.6 | .7 | * |
| psycho/social:depression/ anxiety | 2.6 | 3.3 | 2.6 | ns |
| psycho/social:neurosis | .4 | .4 | .5 | ns |
| psycho/social:psychoses | .4 | .1 | .1 | ns |
| psycho/social:psychosomatic | .6 | .6 | .6 | ns |
| cough | .4 | .1 | .2 | ns |
| fatigue | .1 | .1 | .0 | ns |
| fever | .1 | .1 | .2 | ns |
| headache | .3 | .3 | .4 | ns |
| malingering | .0 | .0 | .0 | ns |
| pain | 1.2 | 1.4 | .9 | ns |
| % PATIENTS WITH ICDA CLASS: | n=357 | n=90 | n=51 | |
| infective-parasitic | 4.4 | 4.7 | 4.4 | ns |
| neoplasms | 2.5 | 2.0 | 1.7 | ns |
| endocrine, nutrition & metabolic | 4.0 | 5.5 | 4.9 | ns |
| blood-forming organs | .7 | .6 | .4 | ns |
| mental disorders | 4.0 | 4.7 | 2.8 | ns |
| nervous system & senses | 3.8 | 3.9 | 4.0 | ns |
| circulatory system | 13.2 | 11.0 | 12.2 | ns |
| respiratory system | 16.9 | 14.6 | 14.4 | * |

TABLE C - Continued

| VARIABLE | ACTIVE MEMBER OF AAFP | BOARD-CERTIFIED IN FP ONLY | SELF-DESIGNATED | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|---|
| | n=357 | n=90 | n=51 | |
| digestive system | 4.5 | 4.0 | 5.0 | ns |
| genitourinary system, variable description | 5.3 | 6.0 | 6.2 | |
| pregnancy, birth, pueperium | .7 | .7 | .6 | |
| skin & subcutaneous | 4.0 | 3.9 | 5.0 | |
| musculo-connective | 4.7 | 3.9 | 4.9 | |
| congenital anomalies | .3 | .5 | .3 | |
| perinatal morbidity | .1 | .1 | .1 | |
| symptoms, ill-defined | 5.1 | 7.3 | 6.3 | |
| accidents, etc. | 10.7 | 10.0 | 10.3 | |
| well patient | 15.2 | 16.7 | 16.5 | |

TABLE D

PSYCHIATRY

COMPARISON OF SELF-DESIGNATED PHYSICIANS WITH
RESIDENCY TRAINED AND/OR BOARD-CERTIFIED PHYSICIANS

TABLE D

| VARIABLE | BOARD CERTIFIED OR RESIDENCY TRAINED IN PSYCHIATRY | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| | n=641 | n=56 | |
| hrs per day in inpatient setting[1] | 0.9 | 0.7 | ns |
| hrs per day in outpatient setting[1] | 2.9 | 1.6 | ** |
| hrs per day in teaching, research & administration[1] | 1.3 | 1.3 | ns |
| hrs per day in direct patient care[1] | 4.2 | 2.5 | ** |
| | n=496 | n=42 | |
| # inpatients seen weekly | 19.3 | 20.4 | ns |
| # outpatients seen weekly | 29.2 | 15.7 | ** |
| # patients seen by other staff weekly | 20.6 | 17.3 | ns |
| % PATIENTS WITH A FOCUS OF: | n=514 | n=35 | |
| well patient | 2.2 | 2.9 | ns |
| skin, including nails, hair | .2 | .9 | * |
| head/neck | .1 | .3 | ns |
| eyes | .1 | .2 | ns |
| ear/nose/throat | .2 | .3 | ns |
| breasts | .0 | .0 | ns |
| respiratory | .4 | .6 | ns |
| circulatory | .6 | .9 | ns |
| blood/lymphatics | .1 | .1 | ns |
| gastrointestinal | 1.1 | .3 | ns |
| musculoskeletal | .9 | 1.0 | ns |
| endocrine | .2 | .4 | ns |
| neurological | 1.5 | .8 | ns |
| genitourinary | .5 | 1.0 | ns |
| obstetrical | .0 | 1.0 | ** |

TABLE D -- Continued

| VARIABLE | BOARD CERTIFIED OR RESIDENCY TRAINED IN PSYCHIATRY n=514 | SELF-DESIGNATED ONLY n=35 | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| mental status: appearance | .4 | .1 | ns |
| mental status: orientation | .4 | .3 | ns |
| mental status: feeling/affect/mood | 37.0 | 29.0 | ns |
| mental status: activity/behavior | 7.3 | 10.9 | ns |
| mental status: impulse control | 3.3 | 6.6 | ** |
| mental status: speech | .1 | .0 | ns |
| mental status: interpersonal relationships | 14.5 | 15.3 | ns |
| mental status: though content, delusions | 10.6 | 10.3 | ns |
| mental status: thought process, memory, logic | 5.2 | 4.9 | ns |
| mental status: intellectual function | .6 | 2.8 | ** |
| insight | 5.5 | 2.4 | ns |
| multi-system | 7.1 | 6.9 | ns |
| % PATIENTS WITH AN ETIOLOGY OF: | | | |
| none | 1.3 | .6 | ns |
| health assessment | .2 | 1.4 | ** |
| developmental | .3 | .0 | ns |
| pre/post-surgical | .3 | .0 | ns |
| iatrogenic | .2 | .1 | ns |
| idiopathic (based on workup) variable description | .5 | .5 | ns |
| infection/post-infection | .5 | 1.3 | ns |
| inflammation | .1 | .2 | ns |
| hemorrhaging/bleeding | .1 | .0 | ns |
| occlusion | .2 | .4 | ns |
| ulceration | .0 | .1 | ns |

TABLE D - Continued

| VARIABLE | BOARD CERTIFIED OR RESIDENCY TRAINED IN PSYCHIATRY | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| allergic/immunologic | .2 | .2 | ns |
| metabolic/deficiencies | .2 | .4 | ns |
| nutrition, including weight | .2 | .0 | ns |
| congenital | .2 | .0 | ns |
| degeneration, including aging | .4 | .2 | ns |
| hypertension | .2 | .4 | ns |
| neoplasm-benign | .1 | .0 | ns |
| neoplasm-malignant | .5 | .0 | ns |
| neoplasm-undetermined | .1 | 1.0 | ** |
| poison-variable description | .0 | .1 | ns |
| tobacco | .1 | .0 | ns |
| trauma | .9 | 2.1 | ns |
| schizophrenia | 18.0 | 17.3 | ns |
| affective psychoses | 9.8 | 9.1 | ns |
| psychoses-other | 2.1 | 1.1 | ns |
| neuroses | 33.1 | 23.3 | * |
| personality/behavior disorders (nonppsychotic) | 15.0 | 22.2 | * |
| organic brain syndrome-with or without psychosis | 2.0 | .9 | ns |
| psychophysiologic | 1.7 | .3 | ns |
| sexual dysfunction | .6 | .3 | ns |
| drug dependence/reaction | .9 | 3.2 | ** |
| alcoholism | 3.2 | 7.2 | * |
| transient/situational | 5.3 | 5.0 | ns |
| mental retardation | .6 | .6 | ns |
| undetermined variable description | 1.1 | .9 | ns |

TABLE D - Continued

| VARIABLE | BOARD CERTIFIED OR RESIDENCY TRAINED IN PSYCHIATRY n=517 | SELF-DESIGNATED ONLY n=36 | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| % PATIENTS WITH MAJOR ICDA CLASS OF: | | | |
| infective-parasitic | .2 | .0 | ns |
| neoplasms | .3 | .9 | ns |
| endocrine, nutritional, & metabolic | .4 | .0 | ns |
| blood-forming organs | .2 | .0 | ns |
| mental disorders | 93.9 | 90.5 | ns |
| nervous systems & senses | .5 | 1.0 | ns |
| circulatory systems | .4 | .4 | ns |
| respiratory system | .1 | .1 | ns |
| digestive system | .2 | .0 | ns |
| genitourinary system-variable description | .1 | .1 | ns |
| pregnancy, birth, pueperium | .0 | .0 | ns |
| skin & subcutaneous | .0 | .1 | ns |
| musculo, connective | .2 | .2 | ns |
| congenital anomalies | .0 | .0 | ns |
| perinatal morbidity | .0 | .0 | ** |
| symptoms, ill-defined | 1.8 | 4.1 | * |
| accidents, etc. | .5 | 1.2 | ns |
| well patient | 1.3 | 1.3 | ns |

TABLE E

OBSTETRICS/GYNECOLOGY

COMPARISON OF SELF-DESIGNATED PHYSICIANS WITH RESIDENCY TRAINED AND/OR BOARD-CERTIFIED PHYSICIANS

TABLE E

| VARIABLE | BOARD-CERTIFIED OR RESIDENCY TRAINED IN OB/GYN | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| | n=757 | n=126 | |
| hrs per day in inpatient setting[1] | 2.3 | 3.0 | ** |
| hrs per day in outpatient setting[1] | 2.8 | 2.2 | ** |
| hrs per day in teaching, research & administration[1] | 0.9 | 0.8 | ns |
| hrs per day in direct patient care[1] | 5.5 | 5.3 | ns |
| | n=588 | n=92 | |
| # inpatients seen weekly | 38.3 | 41.0 | ns |
| # outpatients seen weekly | 88.7 | 59.4 | ** |
| # patients seen by other staff weekly | 23.6 | 45.1 | * |
| % PATIENTS WITH A FOCUS OF: | n=593 | n=94 | |
| well patient | 34.2 | 26.0 | ** |
| skin, including nails, hair | .6 | .6 | ns |
| head/neck | .2 | .3 | ns |
| eyes | .2 | .3 | ns |
| ENT | .2 | .5 | ns |
| respiratory | .2 | .3 | ns |
| circulatory | .5 | 1.0 | ** |
| blood/lymphatics | .4 | .5 | ns |
| gastrointestinal | .8 | 1.6 | ** |
| musculoskeletal | .5 | .4 | ns |
| neurological | .2 | .2 | ns |
| emotional | .9 | .5 | ns |
| genitourinary-male | .8 | .6 | ns |
| breasts-variable description | 1.3 | 1.0 | ns |
| ovaries | 2.4 | 3.3 | ns |
| fallopian tubes | 3.1 | 2.4 | ns |

TABLE E - Continued

| VARIABLE | BOARD-CERTIFIED OR RESIDENCY TRAINED IN OB/GYN | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| | n=593 | n=94 | |
| uterus | 15.2 | 15.5 | ns |
| endometrium | 1.7 | 2.0 | ns |
| cervix | 4.3 | 6.1 | * |
| vagina | 4.9 | 4.5 | ns |
| external genitalia | 1.5 | 2.6 | ** |
| urinary tract | 1.4 | 1.6 | ns |
| abdomen/peritonium | 1.6 | 2.1 | ns |
| pelvic support | 1.4 | 1.1 | ns |
| pelvis-other | 2.7 | 2.9 | ns |
| placenta | .6 | .7 | ns |
| fetus | 7.2 | 7.6 | ns |
| amniotic fluid | .2 | .8 | ** |
| endocrine-variable description | 1.6 | 1.1 | ns |
| menstruation | 2.3 | 1.0 | ns |
| multi-system | 7.0 | 10.6 | ns |
| % PATIENTS WITH AN ETIOLOGY OF: | n=587 | n=93 | |
| none | 11.5 | 8.7 | ns |
| health assessment | 25.7 | 12.7 | ** |
| developmental | 1.1 | 1.2 | ns |
| pre/post-surgical | 7.9 | 8.5 | ns |
| iatrogenic | .5 | .8 | ns |
| idiopathic(based on workup) variable description | 1.1 | 1.2 | ns |
| infection/post-infection | 5.9 | 8.8 | ** |
| inflammation | 2.5 | 3.1 | ns |
| hemorrhaging/bleeding | 4.9 | 4.7 | ns |
| discharge | 1.2 | 1.7 | ns |

TABLE E - Continued

| VARIABLE | BOARD-CERTIFIED OR RESIDENCY TRAINED IN OB/GYN | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| | n=587 | n=93 | |
| occlusion | .2 | .1 | ns |
| ulceration | .3 | .3 | ns |
| immunologic | .0 | .3 | ** |
| allergic | .2 | .3 | ns |
| metabolic | .7 | .6 | ns |
| deficiencies | .3 | .4 | ns |
| nutrition, including weight | .6 | .5 | ns |
| congenital | .7 | 1.4 | ns |
| degeneration | .2 | .2 | ns |
| hypertension | .4 | 1.7 | ** |
| neoplasm-benign (variable description) | 4.0 | 4.5 | ns |
| neoplasm-malignant | 2.5 | 4.6 | ns |
| neoplasm-undetermined | 1.0 | 1.0 | ns |
| intoxication/addiction | .0 | .1 | ns |
| trauma | .2 | .4 | * |
| toxemia | .5 | .6 | ns |
| normal labor | 4.7 | 9.6 | ** |
| abnormal/premature labor | .8 | 1.5 | ns |
| disproportion | .6 | .7 | ns |
| malpresentation | .4 | .4 | ns |
| lactation | .2 | .6 | ns |
| pelvic relaxation | 1.9 | 2.1 | ns |
| infertility | 1.6 | 1.4 | ns |
| sexual dysfunction | .4 | .1 | ns |
| menopause | 2.0 | 1.7 | ns |

TABLE E - Continued

| VARIABLE | BOARD-CERTIFIED OR RESIDENCY TRAINED IN OB/GYN | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| | n=587 | n=93 | |
| family planning, including fertility control, variable description | 6.6 | 5.4 | ns |
| unwanted pregnancy | 1.6 | 2.0 | ns |
| abortion | 1.2 | 1.9 | ns |
| sterilization | 1.5 | 1.1 | ns |
| psycho/social:general adjustment | .3 | .2 | ns |
| psycho/social:depression/anxiety | .4 | .4 | ns |
| psycho/social:neuroses | .1 | .0 | ns |
| psycho/social:psychoses | .0 | .1 | * |
| psycho/social:psycho-somatic | .2 | .1 | ns |
| undetermined:fatigue | .1 | .0 | ns |
| undetermined:fever | .0 | .1 | ns |
| undetermined:headache | .1 | .1 | ns |
| undetermined:malingering | .0 | .3 | ** |
| psycho/social:pain | 1.0 | 1.4 | ns |
| psycho/social:mass (non-fetal) | .2 | .2 | ns |
| % PATIENTS WITH A MAJOR ICDA CLASS OF: | n=592 | n=93 | |
| infective/parasitic | 1.7 | 1.6 | ns |
| neoplasms | 5.8 | 8.5 | * |
| endocrine, nutrition & metabloic | .6 | .6 | ns |
| blood-forming organs | .1 | .2 | ns |
| mental disorders | .7 | .7 | ns |
| nervous system & senses | .8 | .4 | ** |
| circulatory system | .4 | .7 | * |
| respiratory system | .2 | .3 | ns |
| digestive system | .4 | .8 | ** |

TABLE E - Continued

| VARIABLE | BOARD-CERTIFIED OR RESIDENCY TRAINED IN OB/GYN | SELF-DESIGNATED ONLY | SIGNIFICANT DIFFERENCES[2] |
|---|---|---|---|
| | n=592 | n=93 | |
| genitourinary system-variable description | 20.3 | 20.5 | ns |
| pregnancy, birth, plueperium | 7.7 | 14.1 | ns |
| skin & subcutaneous | .3 | .4 | ns |
| musculo, connective | .1 | .1 | ns |
| congenital anomalies | .1 | .1 | ns |
| perinatal morbidity | .1 | .8 | * |
| symptoms, ill-defined | 2.2 | 3.4 | * |
| accidents, etc. | .8 | .9 | ns |
| well patient | 58.4 | 45.7 | ** |

attributable to full-time teaching, research and administrative activities). Physicians practicing in United States territories were, however, excluded from the study.

## 2. Creating Aggregate Estimates

Because the data on graduate medical education and the projections of future physician practice are available in aggregate form only, it was also necessary to convert the physician and patient level measurements into aggregate measures over all physicians. For the measures obtained at the physician level, this was a simple matter of obtaining averages over physicians. Because the USC study over-sampled physicians in some practice arrangements (e.g., group practices) and undersampled in others, it was necessary to weight these averages according to the sampling fractions obtained for physicians in five practice arrangements (solo, partnership, group, institution, and other) so that the overall population distribution would be accurately represented.

In creating aggregates for measures obtained at the patient level (e.g., patient encounter data), encounters were aggregated overall rather than first aggregated to the physician level and then averages (or sums) aggregated over physicians. Under the assumption that the distribution of patients encounters among physicians in the sample is representative of that in the population, a simple aggregation over all encounters will provide equally accurate estimates of physician practice characteristics in the population at a fraction of the cost. In addition, this is consistent with the type of data available for GME and for 1990 normative practice, which represents simple specialty averages rather than averages taken first over physicians in the specialty.

## 3. Correction Estimates for Underenumeration

Many estimates for the proposed study were derived from the patient encounter section of the USC log diary (especially those on diagnostic and procedural focus). The USC data base provided a mechanism for checking the accuracy of population estimates of the number of encounters made using the patient encounter data collected on the instrument. This check was provided by the "Week's Practice Summary" which called for overall counts of the number of

inpatients and outpatients over the entire study week. (This data was found to be highly reliable in an independent audit made of the data quality of the survey instrument. (See Perrin et al., 1978).

Using this comparison data it has been found that inpatient encounters in the PE section were under enumerated, owing primarily to the difficulty of recording encounter information on the inpatient setting. (Another factor of less importance is that Sunday was excluded in the patient encounter section.) On the basis of this, a series of correction factors that can be applied to estimates was developed in order to correct for these biases. Using these correction factors, population estimates derived from the patient encounter section closely match those derived from the Week's Practice Summary (which have also been corrected to account for different numbers of vacationing physicians in the different specialty surveys).

The need to make this adjustment when calculating the ambulatory versus inpatient emphasis of specialty is obvious. Application of the correction factor can also make a difference in the analysis of diagnostic focus since the frequency of certain conditions and procedures is different in inpatient and outpatient settings. Without the correction factor those problems that occur primarily in inpatient settings would be under-represented when examining the diagnostic emphasis of the specialty as a whole.

The calculation of the correction factors essentially involved obtaining the proportion of total weekly patient encounters that were inpatient from the Week's Practice Summary (WPS) section and multiplying this by the inverse of the parallel proportion obtained over all encounters in the Patient Encounter (PE) section:

The inpatient correction factors were applied to all measures obtained for encounters in the inpatient settings; the outpatient correction factors were applied to measures for outpatient encounters. By applying these correction factors to the number of daily patient encounters reported in the PE section, the tendency to underenumerate inpatient encounters was adjusted for, and accurate population estimates were derived.

## 4. Calculation of Standard Errors

Although the sample of residents included in the USC study is a relatively small one (52 residents in Psychiatry, 79 in OB/GYN and 71 in Family Practice) it is nevertheless a probability sample. Therefore, estimates based on this sample reflect true population values within the limits of sampling error. The measurement of sampling error is, therefore, a crucial component of the analytical strategy, since it determines the limits on the inferences that can be made.

Measurement of sampling precision was not a simple procedure in this study. The USC patient encounter data upon which all statistics regarding diagnostic and procedural focus are based is a complex multi-stage cluster sample, which is additionally stratified on the basis of the physician's practice arrangement. The standard error formulae for simple random sampling do not hold for this type of design, as shown by the following formula which expresses the cluster sample standard error in terms of that for a simple random sample:

$$\sigma_c^2 = \frac{1 - f}{m - \bar{n}} \sigma_{SRS}^2 \{1 + \delta(\bar{n} - 1)\}$$

where

$\sigma_c^2$ is the variance of the cluster sample estimate

$\sigma^2_{SRS}$ is the variance of the comparable simple random sample estimate

f is the finite population correction

m is the number of primary selection units (i.e., physicians)

$\bar{n}$ is the average size of a cluster (i.e., the average number of patient encounters per physician)

$\delta$ is the intracluster coefficient (i.e., the degree to which the patient encounters of a given physician tend to be similar to each other and different from those of other physicians).

As can be seen, a cluster sample tends to decrease the precision of estimates over what would have been obtained in a simple random sample; precision is decreased a factor of $(1 + \delta(n - 1))$ so that the magnitude of the decrement is a function of the homogeneity or heterogeneity of patient encounters over physicians. This factor will be different for each variable examined in the analysis (i.e., for some variables physicians will tend to be homogeneous and for others heterogeneous). Calculation of this term requires a four-fold increase in computer capacity, which is prohibitively costly when many variables are to be examined using files having from 11,000 to 35,000 observations (as in the present study).

Calculation of error terms for physician-based (rather than encounter-based) variables also presented a number of problems. The physician-based sample is also complex, being a stratified sample based on practice arrangement with disproportionate sampling by strata. This greatly increases the programming costs involved in the calculation of standard errors. In addition, some of the statistics presented in the following tables represent ratios of means which adds a term (for the covariance of the two variables

comprising the ratio) to the standard error. As with variables taken from the patient encounter section, the calculation of standard errors for every statistic presented in the tables was considered too costly.

This problem was handled in the following way. Given the sample sizes in the study, very small differences were likely to be statistically significant (especially for patient encounter-based analyses). For Psychiatry, the specialty with the smallest numbers of observations (643 patient encounters for residents and 11,402 for practicing physicians), a 2% difference between residents and physicians on any given variable would be significant at the $p.05$ level, if these encounters had been drawn using a simple random sample. Assuming a moderately high degree of homogeneity within a given physician's set of patient encounters ($\delta = .3$) this figure approximately doubles, so that a 4% difference would be required for significance. For Family Practice and OB/GYN, which both have larger numbers of observations, these figures change to 1% (under simple random sampling assumptions) and 3% (for a cluster sample with a moderate degree of homogeneity).

In any study, differences that achieve statistical significance must be distinguished from those of substantive interest. For the most part small differences, even if significant, are not considered substantively interesting (E.g., if the study shows 10% of the encounters of residents to be with hypertensive patients and 13% of the encounters of physicians to be with such patients, this difference would not have been considered a particularly noteworthy finding.) Therefore, the strategy adopted in this study was to calculate all statistics of interest without calculating the corresponding error terms. These estimates were then examined from a substantive point of view and error terms calculated for differences that were of theoretical interest and would be focused on during the panel review. This strategy was adopted for both patient encounter-based and physician-based estimates. In the following tables, then, sampling precision has been calculated only for those estimates noted. No assessments were made for any statistics unless so indicated.

## APPENDIX A-3

## GMENAC DATA

The most comprehensive approach to manpower planning to date has been achieved through the efforts of the Graduate Medical Education National Advisory Committee (GMENAC). GMENAC was chartered in 1976 to advise the Secretary of Health and Human Services (formerly Health, Education and Welfare) on physician manpower planning. This committee was mandated to project the need for the future supply of physicians by specialty and to examine issues affecting physician supply. These issues include the financing of medical education, the role of nonphysician providers, geographic distribution of physicians and the effects of the educational environment on specialty choice.

The projection process used by GMENAC had two components:

- o Physician Requirements:

  Estimating the number of physicians needed by specialty to provide a desired level of care in 1990.

- o Physician Supply:

  Estimating the expected supply of physicians by specialty in 1990.

Physician requirement estimates were then matched to physician supply estimates specialty by specialty in order to determine which specialties would be in short supply and which in surplus by 1990.

Three models were developed to make these estimates: the Physician Supply model, the Graduate Medical Education model, and the Physician Requirements model. The Physician Supply model and the Graduate Medical Education model were both used to estimate physician supply. The Physician Requirements Model --

used to estimate the number of physicians needed in 1990 -- provided the data for the present analysis. This model, termed the Adjusted Needs-Based Model, calculates medical service requirements on the basis of need for care as reflected in the actual incidence/prevalence of morbidity. Starting with morbidity rates (adjusted for predicted changes in the age and sex composition of the population), GMENAC estimated the percentage of these cases that should be seen by a physician, the amount of service required from the physician and the number of services each physician is capable of providing (i.e., physician productivity).

Given these data, it is possible to calculate the total number of physicians required either currently or in the future (contingent on predicted changes in biologic incidence, services requirements, and productivity). As stated by GMENAC (1980, Vol. II, P. 7).

> ...This calculation is done by multiplying the number of individuals in the population by the total number of diseases or conditions and the services required per disease or condition for each specialty and then dividing this product by the average workload or desirable workload of each category of specialist. In this method, the health problems that are expected to occur serve as the basis for establishing the desired level of manpower.

The starting point for the estimates was actual data on the incidence and prevalence of disease, as well as data on service norms and physician productivity. These values can be expected to change, however, based not only on changes in the composition of the population by 1990, but on changes in the medical environment (e.g., advances in the prevention of disease, changing norms of care, changing patterns of delegation, changes in physician productivity). Therefore, GMENAC utilized panels of experts to make estimates of the key parameters in the model (e.g., incidence, service requirements, etc). These estimates were to reflect, not current values, but values that were expected to prevail in 1990.

The panels -- termed "Delphi" panels -- were convened for each of the specialties studied by GMENAC. They were composed primarily of physicians in that specialty with additional representatives from other specialties. Approximately 180 physicians and 30 non-physician health professionals served on the various specialty Delphi panels. The panels met twice and made estimates for each of the key parameters (i.e., incidence, service requirements, etc.). The parameter estimates were then given to the modeling panel which was charged with developing the mathematical model to project physician requirements (as well as physician supply) and with incorporating other considerations concerning demand-related constraints in the model. In addition, the modeling panel adjusted for overlaps in the provision of care among different specialties.

In all, requirement projections were made for 27 medical and surgical specialties, including Family Practice, General Internal Medicine, the 11 subspecialties of Internal Medicine, Pediatrics (including the 6 subspecialties), General Surgery, Neurosurgery, Ophthalmology, Orthopedic Surgery, Otolaryngology, Plastic Surgery, Thoracic Surgery, Urology, Obstetrics/Gynecology, Dermatology, Emergency Medicine, Preventive Medicine, and Psychiatry. (Preliminary, non-modeled projections were available as of the September, 1980 date of the GMENAC reports for 6 additional specialties: Physical Medicine and Rehabilitation, Anesthesiology, Nuclear Medicine, Pathology, Radiology, and Neurology.)

The GMENAC projections address each of the four training dimensions of central interest to this study and provide disease-specific estimates of patient visits to physicans and non-physician providers in 1990. The projections made for each specialty have been published in separate volumes, each including extensive tabulations of disease specific projections. In addition, specific GMENAC report volumes deal exclusively with special topics, such as the use of non-physician personnel. In this study, use was made of most data published in the Psychiatry and OB/GYN report volumes. Data for Family Practice came from the general adult medical care tabulations provided by the Office of Graduate Medical Education/HRA. Lengthy tabulations from those volumes and documents were key entered on computer media to facilitate their use in the analyses. Other projections were obtained from the text and from other volumes so that all of the questions of central interest to this study could be addressed.

## APPENDIX A-4

## DESIGN OF THE ANALYSES

As stated previously, the goal of the present study is to examine the relationship between graduate medical education and subsequent practice, both current and 1990 normative, along four major dimensions -- diagnostic and procedural content; ambulatory versus inpatient focus; teaching, research, and administrative activities; and use of nonphysician providers. The most parsimonious approach is to derive a single set of comparable measures for each of these dimensions from the GME, current practice, and 1990 normative data. This was done whenever possible. However, the GMENAC adjusted needs-based model incorporated certain restrictions in the development of its estimates. For example, in Family Practice, data on the diagnostic content of general adult care (on which Family Practice projections were based) were modeled only for the ambulatory component of the practice and only for patients 17 years of age or older. Psychiatry similarly examined only patients 18 years or older (although it did examine all practice settings). Projections for Obstetrics/Gynecology also incorporated age restrictions for certain settings and types of care.

In addition to this restriction on the settings and ages covered, the GMENAC projections were made in terms of ICDA-8 codes and cannot, therefore, be used to measure aspects of practice which cut across conditions or which are not reflected in the ICDA codes. As a result, association with certain concepts prominent in residency training such as emergency care, geriatric care, surgery and so forth, cannot be assessed.

The strategy followed in the analysis, therefore, was to design two sets of analyses when necessary: The first was between GME and current practice alone. In general, this analysis covered all practice settings and age groups, and also allowed for greater detail on a wider range of training issues. The second set of analyses focused on the congruence between GME and the 1990 normative practice forecasts. To ensure that any apparent differences between GME and normative practice patterns for 1990 were not the result of the data artifacts noted previously, indices for current practice were also calculated using the

same restrictions as used in the GMENAC projections. The first set of analyses -- using the full range of current practice data -- will thus show the congruence of GME with current practice as it actually exists. The second set, in effect, standardized the content of current practice against the GMENAC norm, so that any differences in congruence between GME and current and 1990 normative practice patterns can be attributed to changes that are projected to occur by 1990, rather than differences in content of the current and 1990 normative data sets.

## A. DEVELOPMENT OF INDICES

As noted above, the congruence analysis relied on three data sets for the bulk of the statistics: the ACGME accreditation questionnaires or other program level data from individual residency programs, the USC Practice Profile Study (which includes a subsample of residents, as well as practicing physicians), and the GMENAC adjusted needs-based projections by specialty. The major problem in the development of indices was how to select, tabulate, and scale data so as to permit valid comparisons between GME, on the one hand, and current and projected practice patterns on the other. Difficulties in making precise comparisons were alluded to previously. Data from the three sources are expressed in different units, with different levels of detail, and with different emphasis.

There are three types of statistics that may be used to describe residency training experiences:

(1) a percentage of all training experience (either in terms of time or volume of experience)

(2) a percentage of all residents receiving the experience

(3) a percentage of all programs providing the experience

The USC data on current practice patterns and the GMENAC data on 1990 normative practice patterns are both capable of describing practice characteristics as a proportion of aggregate volume (either time or encounters) in a specialty. The optimum data set on graduate training would be collected on residents rather than residency programs and would thus permit relevant training

experiences to be expressed in terms of the first class of statistics, i.e., as a proportion of all residency training time. In general, however, (except for the sample of residents in the USC Practice Profile Study) most data on residency training, particularly that obtained across individual residency programs, is not capable of providing these statistics except in an indirect manner.

There are several kinds of data gathered in the residency accreditation questionnaires, each of which presents varying difficulties of interpretation. These discrepancies are:

(1) The same (minimum) level of experience in a given area is attained by all residents and the magnitude of this experience is indicated in the questionnaire. (The most common example of this type of item are the yearly rotational charts for curriculum, showing first year residents spending 40% of their time in internal medicine, second year residents 20% of their time, etc.)

(2) The same (minimum) level of experience is attained by all residents but the magnitude of this experience is not indicated (e.g., the questionnaire states only that all residents receive training in electrocardiography but does not indicate the amount of time in this training).

(3) A variable level of experience is provided to residents (i.e., different residents in the program receive different amounts of training in an area with some receiving none) and the questionnaire indicates the numbers attaining at least a certain level of this experience.

(4) A variable level of experience is provided to residents and no indication of the amounts provided different residents is given; however, an average level is indicated across all residents. This average level may be indicated in precise quantitative terms or in qualitative terms (e.g., all residents receive "some" teaching experience).

(5) A variable level of experience is provided to residents and no indication of the relative amounts provided is given.

Only the first type of data is capable of being translated directly into a measure of proportion of residency time. (This can be done by multiplying the percentages in each program times the number of residents in the program and dividing by the total number of residents.)

Thus, in assessing the congruence between residency training and current or projected practice patterns, one will in many cases be forced to make inferences based on statistics that are not strictly comparable. These statistics may nevertheless be adequate to indicate important differences. (As an extreme example, if 50% of the current practice content in a specialty were devoted to major surgery while only 10% of the programs included this in their curriculum this would indicate a significant gap in the curriculum.) Therefore, the use of different units in the calculation of these statistics does not preclude meaningful analysis. In every case possible, however, we attempted to find or develop statistics which expressed training experiences as meaningful statistics on residency time.

Only the USC practice profile study, however, which includes a sample of residents and uses the physician as a unit of analysis, is capable of comparing training and practice experience using precisely the same variables and units. Therefore, in the attempt to develop indices for GME and current practice that use comparable definitions, populations and units, the analysis relied heavily on the comparison of USC residents and practicing physicians to amplify and replicate findings based on other sources.

The following section describes the approach to comparing training and practice on each major dimension (i.e., diagnostic and procedural focus; ambulatory versus inpatient emphasis; teaching, research, and administration; and use of nonphysician providers) using the available data sets.

## 1. Development of Indices for Comparing the Diagnostic and Procedural Content of Training and Practice

The development of comparable measures on the diagnostic and procedural content of training and practice was in many ways the most problematical. Both the USC Practice Profile Study and the GMENAC projections describe practice content in terms of ICDA-8 conditions and procedure codes, which allows for a relatively refined characterization of practice content. The ACGME questionnaires (and other program-level data), however, do not (except on rare occasions) characterize the training experiences of individual residents in terms of the number or proportion of occasions spent managing certain conditions

or performing specified procedures. These data, instead, concentrate on broad content areas which may or may not be required of all residents. Two problems exist, then, in matching this type of data with the more detailed USC and GMENAC data. The first is in determining what proportion of residents actually receive the experience, the second is in defining the experience precisely. Both aims can be accomplished only within a margin of specificity.

Because residency training is structured in terms of rotations through well-defined specialty areas for a specified period of time, and because these rotations are required of all residents, our analyses of the diagnostic and procedural focus of training relied primarily on the rotational breakdowns provided in the ACGME questionnaires. In making comparisons with current and 1990 normative practice, the conditions seen in practice were translated into broad categories representing the types of rotational assignments that could be made (e.g., ophthalmology, obstetrics, surgery, psychiatry). In doing this, precautions must be taken in interpreting the data. First, although the general focus of a specialty rotation will be known, it is impossible to determine precisely what conditions are encountered in the rotation. Certain critical experiences may not occur as expected in a general rotation. Conversely, a great deal of experience may be obtained which is not specifically labeled as such. The surgical content of OB/GYN training is one such category for which the rotational descriptions do not give any adequate way of assessing the exact magnitude of experience, since much of the surgical experience is obtained in rotations labeled only as general experience in gynecology.

One mechanism for obtaining greater specificity is to examine the conditions seen and procedures performed in the patient populations of the services through which the resident rotates. This data is available in the ACGME questionnaires for each of the specialties examined in the study and constitutes the second component of our strategy for assessing the diagnostic and procedural content of training. This data provides more detailed information about conditions and procedures, but, again, must be interpreted with caution since it describes only the program itself and does not necessarily indicate the experiences that residents themselves receive vis-a-vis the conditions and procedures which dominate the setting of GME training. Use of

this data in fact assumes that residents' experience with such patients occurs in the same proportions as these patients are distributed in the training setting, an assumption which may or may not be warranted.

Despite the caveats that accompany the analysis of the ACGME data, the indices derived from these questionnaires nevertheless provide useful characterizations of residency training. This data indicates in broad outline the general focus of training -- an outline which can be replicated and specified more finely when used in conjunction with the more detailed, resident-level statistics derived from the USC Practice Profile Study. Following is a discussion, by specialty, of the specific measures that were calculated for the study.

**a. Development of Indices for Family Practice**

Indices of the 1990 normative diagnostic and procedural content of Family Practice were taken from the Adult General Care model of the GMENAC projections. These need requirements were estimated for all general adult care physicians simultaneously (General Internists, Family Practitioners and General Practitioners), and the conditions which might be differentially treated by Family Physicians were not disaggregated. Condition-specific service requirements (coded in terms of ICDA-8 categories) were obtained from the Office of Graduate Medical Education of the HRA and used as the basis of the analysis. These projections are presented in Appendix B-3.

Data on the diagnostic and procedural focus of practicing physicians (as well as for a subset of residents) was obtained from the Patient Encounter section of the USC Log Diary which permits description of the individual physician encounters with patients, both in terms of the ICDA-8 coded primary and secondary diagnoses and on a variety of dimensions including:

- o Encounter Location
- o Patient Age
- o Primary Problem Type
- o Focus of the Problem
- o Etiology
- o Urgency of Problem

Two types of data were available from program descriptions (primarily ACGME) of residency training: information on curriculum rotations and information on teaching patients. The data potentially permitted two types of comparisons to be made for assessing the congruence between GME and practice patterns: (1) an analysis based on curriculum rotations and (2) an analysis based on conditions seen among patients. The latter data were not used, however, since they related only to the leading conditions seen in the FP center and did not provide an accurate distribution of all conditions across all patients. In addition, the conditions were described verbally, causing some difficulty in translating them into ICDA-8 categories.

For the curriculum analysis, the rotational breakdowns were taken from page 13 of the ACGME questionnaire for Family Practice (see Appendix B-1). The following rotations predominated and were used as the basis of comparisons:

(1) Family Practice, Internal Medicine and the Subspecialties of Internal Medicine, including

- Cardiology
- Pulmonary Disease
- Gastroenterology
- Hematology
- Endocrinology
- Nephrology

- Oncology
- Rheumatology
- Allergy
- Infectious Diseases

(2) Obstetrics and Gynecology
(3) Psychiatry and/or Behavioral Sciences
(4) Orthopedics
(5) Ophthalmology
(6) Otorhinolaryngology
(7) Dermatology
(8) Neurology
(9) Emergency Medicine
(10) Surgery
(11) Geriatrics

In order to assess the congruence between time spent in rotations versus current and 1990 practice profiles, it was necessary to recode the encounter-based USC data and the condition-based GMENAC data into these specialty-specific categories. Not all of these rotational categories are easily expressed in terms of ICDA codes and, in fact, some, such as Pediatrics or Surgery, represent specialty areas which cut across diagnostic categories. For the first set of analyses -- that between GME and current practice only -- the task was relatively straightforward since the USC data on current practice provide a number of variables which facilitate these codings. These include focus codes (which are particularly useful for comparisons with specialty areas such as Cardiology, Dermatology, or Gastroenterology that are based on a given body system) and etiology codes for specialty areas that cut across body systems but have a similar etiology (e.g., neoplasms for Oncology, infection for Infectious Diseases). Other variables were used to define the remaining areas including the procedure codes for Surgery, the urgency of the problem and/or location of care for Emergency Medicine and the age of the patient for Pediatric and Geriatric medicine. The rotational categories used to describe GME and the corresponding categories calculated from the USC data are presented in Table F. These comparisons included all encounter locations and all patient ages.

TABLE F

USC PRACTICE PROFILE INDICES CORRESPONDING

TO ACGME ROTATIONS

I. FAMILY PRACTICE CURRICULUM:

| | |
|---|---|
| Cardiology | Focus (1st, 2nd, 3rd) = circulatory, heart (11) or circulatory, other (12) |
| Gastroenterology | Focus (1st, 2nd, 3rd) = liver/gall bladder (14), or gastrointestinal - other (15) |
| Pulmonary disease | Focus (1st, 2nd, 3rd) = respiratory, upper (9) or respiratory, lower (10) |
| Hematology | Focus (1st, 2nd, 3rd) = blood/lymphatics (13) |
| Nephrology | Focus (1st, 2nd, 3rd) = renal (22) |
| Rheumatology | Focus (1st, 2nd, 3rd) = arthritis/rheumatism (16) |
| Obstetrics/Gynecology | Focus (1st, 2nd, 3rd ) = breasts (8) or gynecological (25) = obstetrical-intrapartum (27) = obstetrical-antepartum (26) or obstetrical-postpartum (28) |
| Psychiatry/Behavior | Focus (1st, 2nd, 3rd) = emotional (21) |
| Orthopedics | Focus (1st, 2nd, 3rd) = head/neck (3) or arthritis/rheumatism (16) or muscular-other (17) or skeletal-other (18) |
| Opthalmology | Focus (1st, 2nd, 3rd) = eyes (4) |
| Otorhinolaryngology | Focus (1st, 2nd, 3rd) = ears (5), or nose (6) or mouth/throat (7) |
| Dermatology | Focus (1st, 2nd, 3rd) = skin, incl. nails, hair (2) |
| Neurology | Focus (1st, 2nd, 3rd) = neurological (20) |
| Urology | Focus (1st, 2nd, 3rd) = urinary, other (23) or genital, male (24) |
| Endocrinology | Focus (1st, 2nd, 3rd) = endocrine (19) or Etiology (1st, 2nd, 3rd) = metabolic (14) or deficiencies (15) or nutrition, incl. weight (16) |
| Oncology | Etiology (1st, 2nd, 3rd) = neoplasm, benign (20) or neoplasm, malignant (21) or neoplasm, undetermined (22) |
| Allergy | Etiology (1st, 2nd, 3rd) = immunologic (12) or allergic (13) |
| Infectious diseases | Etiology (1st, 2nd, 3rd) = infection/post-infection (7) |

TABLE F (CONTINUED)
USC PRACTICE PROFILE INDICES CORRESPONDING
TO ACGME ROTATIONS

| | |
|---|---|
| Pediatrics | Age < 17 years |
| Geriatrics | Age $\geq$ 65 years |
| Emergency Medicine | Encounter location (V8) = emergency room (5) or encounter classification (V27) = emergency (5) |
| Surgery | Sum of major surgery performed, assist major surgery, minor surgery inpatient, and minor surgery outpatient |

In calculating variables no attempt was made to make categories mutually exclusive since many patient encounters involve problems which relate to more than one specialty area (e.g., a pediatric gastrointestinal disorder or a gynecological neoplasm). In addition, just as the GMENAC projections for General Adult Medical Care were based on both primary and secondary diagnoses (making a subsequent correction for simultaneity), the present analysis also examined primary and secondary conditions. The percentages calculated, therefore, represent the percentage of cases in which a given condition, procedure, age group, etc. is encountered in any form in the practice, and thus, provide overlapping descriptions of the practice. For this reason, the percentages given in the tables will sum to greater than 100%.

While the comparison between ACGME rotations and current practice was facilitated by the variety of codes available in the USC data, that between GME and 1990 normative practice had available only the ICDA codes used in the GMENAC projections. Recoding these into categories for comparison with the rotational breakdowns was more difficult since many conditions may be appropriately treated by more than one specialty, whereas other specialties (e.g., Pediatrics, Anesthesiology) are defined by criteria other than the types of conditions treated. Such rotations were therefore dropped from the GME-1990 normative comparisons. Table G presents the ICDA codes corresponding to the rotational breakdowns used in the analysis. If a code was appropriate in more than one specialty area it was coded in both. The analysis, although imprecise does provide an approximate means of identifying possible differences in residency training, current practice, and 1990 normative practice.

Both the USC data and GMENAC projections were coded using these assignments. In the GMENAC projections some of the codes assigned to a given rotational category were part of in residual groupings which also contained additional codes belonging to other specialty areas. All these codes were excluded from both USC and GMENAC calculations. These excluded codes amounted to 2.5% of the USC encounters and 9.3% of the GMENAC service requirements.

TABLE G

ICDA CODES CORRESPONDING TO

ACGME ROTATIONAL BREAKDOWNS

| Variable | Origin |
|---|---|
| Circulatory disease | ICDA codes: 227, 390-458, 637, 671, 673, 674, 746, 747, 782, 861, 869 |
| Pulmonary disease | ICDA codes: 162, 163, 197, 212, 231, 460-519, 748, 783, 860, 861, 862, 869, 934 |
| Gastroenterology | ICDA codes: 150-159, 197, 211, 230, 163, 520-577, 751, 784, 785, 863-865, 868, 869, 935-938 |
| Hematology | ICDA codes: 196, 200-209, 280-289, 782, 227, 675, 676 |
| Endocrinology | ICDA codes: 240-279, 193, 194, 226 |
| Nephrology | ICDA codes: 403, 404, 580-593, 792, 636, 866 |
| Oncology | ICDA codes: 140-239 |
| Rheumatology | ICDA codes: 710-738, 170, 171, 213, 232, 787 |
| Allergy | ICDA codes: 493, 507, 690-698, 708, 502, 503, 506 |
| Infectious disease | ICDA codes: 001-136, 460-486 |
| General internal medicine, NOS | ICDA codes: 758, 759, 788, 793, 1000-1005, 1008-1030 |
| Obstetrics & Gynecology | ICDA codes: 174, 180-184, 217-221, 233-236, 610-629, 630-645, 670-678, 752, 760-779, 786, 867 |
| Psychiatry | ICDA codes: 290-315, 790 |
| Emergency Medicine | ICDA codes: 800-999 |
| Orthopedics | ICDA codes: 710-738, 754-756, 787, 805-848, 952-957, 170, 213, 232 |
| Opnthamology | ICDA codes: 360-369, 190, 224, 238, 744, 930, 940, 870, 871 |
| Otorhinolaryngology | ICDA codes: 380-389, 140-149, 160, 161, 210, 745, 749, 750, 931-933, 935 |
| Dermatology | ICDA codes: 172, 173, 216, 232, 680-709, 757 |
| Neurology | ICDA codes: 320-358, 430-438, 191, 192, 225, 238, 310-315, 740-743, 780, 781, 786, 791, 794, 800-804, 850-854, 950-959, 789 |
| Urology | ICDA codes: 185-189, 222, 223, 237, 593-607, 635, 752, 753, 867, 878, 939 |

Since the GMENAC projections for Adult General Medical Care are based only on conditions in the ambulatory setting and only for patients aged 17 years and older, a similar restriction was made for the USC data for this portion of the analysis. As in the previous analysis, both the primary and secondary diagnoses were examined, so that obtained percentages represent the percentage of encounters in which a given condition occurred. Percents will, therefore, sum to greater than 100. For the GMENAC calculations a similar measure was devised. The percentage of visits in any one category (uncorrected for simultaneity) was divided by the total service requirements (corrected for simultaneity) for General Adult Medical Care. The simultaneity correction factor employed for Family Practice in the adult general medical care model was 1.5. The number of secondary diagnoses in the USC Family Practice data set was much lower (only 20% of the patient encounters had secondary conditions coded). In order to avoid an artificial disparity between current practice and 1990 normative practice estimates, the GMENAC diagnoses-specific figures were inflated by a factor of only 1.2, reflecting the same simultaneity rate as found in the USC data.

The second type of analysis classified the diagnostic categories occurring for residents, practicing physicians, and 1990 projections. Data were presented in terms of the 18 major ICDA classes, with frequently occurring diagnoses presented at the three-digit level. Again, both primary and secondary diagnoses were examined so that percents may sum to greater than 100%.

The final type of analysis used the detail of the USC data base to examine additional characteristics of training and practice. Of particular interest were dimensions such as newborn care and geriatric care. It was also considered of interest to characterize the role played by family practice in the provision of care, with respect to such dimensions as the number of referrals to other physicians and the amount of continuous care provided during residency training versus subsequent practice. Also relevant is the amount of obstetric care provided by Family Practitioners, particularly the number of deliveries performed, and the amount of surgical care provided, both pre- and post-operative care and actual surgeries performed. The supplementary variables which could be calculated for the comparisons involving USC residents are presented in Table H. Again, these categories are not mutually exclusive.

TABLE H

SUPPLEMENTARY INDICES CALCULATED FOR COMPARISONS

INVOLVING USC RESIDENT POPULATIONS

| | |
|---|---|
| **SURGERY:** | |
| Pre-Post Op | Etiology (1st, 2nd, 3rd) = pre/post surgical (4) |
| Perform minor surgery, inpatient | Primary problem type (V18) = surgical, minor (3) and role (V16) = provide (1) and therapeutic procedures (ordered, performed) = surgical (6-17) and encounter location (V18) = hospital (4) |
| Perform major surgery | Primary problem type (V18) = surgical, major (4) and therapeutic procedures (ordered, performed) = surgical (6-17) |
| Assist major surgery | Primary problem type (V18) = surgical, major (4) and role (V16) = assist (2) and therapeutic procedures (ordered, performed) - surgical (6-17) |
| Perform minor surgery, outpatient | Primary problem type (V18) = surgical minor (3) and role (V16) = provide (1) and Therapeutic procedures (ordered, performed) = surgical (6-17) and encounter location (V8) = nonhospital (1, 2, 3, 5, 6, 7, 8) |
| Total surgical problems | Primary problem type (V18) = surgical, minor (3) or surgical, major (4) or medical & surgical (5), OR Pre/Post OP or Perform Office Surgery |
| **REFERRALS:** | |
| Physician for care | Referral Consultation (V29) = Med spec for care (3) or Surg spec for care (5) |
| Physician for consultation | Referral Consultation (V29) = Med spec for consult (4) or Surg spec for consult (6) |
| Other, referral | Referral/Consultation (V29) = Dentist (7) or Physician extender (8) or Therapist/Technician (9) or Public Agency/Social Worker (10) or Other (11) |
| **CONTINUITY OF CARE:** | |
| Regular patient | Regular patient (V12) = yes (1) |
| Seen patient before | Seen patient before (V11) = yes (1) |
| Patient source | Patient source (V13) = self/patient (1) |
| Majority of patient care | Majority of care (V14) = yes (1) |
| **OBSTETRICAL CARE:** | |
| Delivery | Focus (1st, 2nd, 3rd) = obstetrical-intrapartum (27) |
| Pre/Postpartum Care | Focus (1st, 2nd, 3rd) = obstetrical-antepartum (26) or obstetrical-postpartum (28) |

**b. Calculation of Indices in Psychiatry**

As with the examination of Family Practice, three types of analyses were performed to assess the congruence between GME and practice patterns: (1) an analysis based on curriculum rotations, (2) an analysis based on the diagnostic categories treated, and (3) an analysis of additional practice characteristics using the USC data only.

The first set of analyses was based on the types of inpatients included in the teaching program (taken from page 5 of the ACGME questionnaire). The following categories are included:

(1) Psychiatric patients broken down by age category (adult, adolescent, child) and by diagnosis:

Psychoses
Neuroses
Character Disorders
Psycho-Physiologic Disorders
Mental Retardation
Alcoholism
Drug Addiction
Neurological Syndromes
Geriatric (over age 65)

(2) Psychiatric consults to other services
(3) Neurological patients
(4) Medical and surgical patients

With some collapsing, these categories are directly comparable to those used in making the GMENAC projections which modeled service requirements in terms of the following conditions:

(1) Schizophrenia and other Psychoses

(2) Affective Disorder Psychoses

(3) Affective Disorder Neuroses

(4) Neuroses and Personality Disorders

(5) Alcohol Addiction

(6) Drug Abuse

(7) Mental Retardation

(8) Organic Brain Syndrome

(9) Other (which includes transient situational disturbances, sexual and marital dysfunction, and psychophysiological disorders)

Nonpsychiatric conditions were not included in GMENAC projections. Similarly, child psychiatric conditions were excluded from the model but added subsequently as a proportion of care.

Encounters in the USC practice profile data were coded into these classes. The following nonpsychiatric categories were also defined: (1) non-psychiatric neurological, (2) psychiatric consults, and (3) medical and surgical encounters. Table I presents the algorithms for defining these diagnostic categories. As can be seen, the USC etiology variable was used to define the psychiatric conditions rather than the ICDA-8 diagnoses code. The former, being directly coded by the physician, was considered more reliable than the post-coded ICDA diagnosis. "Nonpsychiatric neurological" was defined as any encounter with a neurological focus, but without a psychiatric etiology. "Medical/Surgical" was defined as any encounter with a primary problem type labeled "Medical" or "Medical/Surgical" and, again, without a psychiatric etiology. Consult was any encounter which the physician labeled as a consult, without regard to diagnosis: this category, therefore, covers both psychiatric and nonpsychiatric problems.

TABLE I

USC CODES FOR DEFINING PATIENT POPULATIONS

| Variable | Origin |
|---|---|
| Psychoses | Etiology (V20) = affective psychoses (25), schizophrenia (24) or psychoses, other (26) |
| Neuroses | Etiology (V20) = neuroses (27) |
| Personality disorder | Etiology (V20) = personality/behavior disorders (non-psychotic) (28) |
| Psychophysiologic | Etiology (V20) = psychophysiologic (30) |
| Mental retardation | Etiology (V20) = mental retardation (35) |
| Alcoholism | Etiology (V20) = alcoholism (33) |
| Drug addiction | Etiology (V20) = drug dependence/reaction (32) |
| Other psychiatric | Etiology (V20) = transient/situational (34) or sexual dysfunction (31) |
| OBS | Etiology (V20) = organic brain syndrome - w/wo psychosis (29) |
| Other neurological | Focus (V19) = neurological (13) and Etiology (V20) ≠ 24 through 35 and Etiology (V20) ≠ missing (0) |
| Consult to Med./Surg. | Patient source (V13) = consults (5) |
| Other medical, surgical | Primary problem type (V18) = medical (2) or surgical, minor (3) or surgical, major (4) or medical and surgical (5) or obstetrical (6) and patient source (V13) ≠ consult (5) and none of the above |

Because the ACGME patient distributions were for inpatients only, the analyses of USC data and GMENAC projections were done both for inpatients and for all patients combined. When making comparisons to the GMENAC data, the two inpatient practice settings (acute hospitalization and 24-hour institutional) were used.

Some effort was required in developing comparable units of analysis for the three data sets. GMENAC projections are based on units of time by condition treated but may also be used to calculate the distribution of patients (using Table 5 of the OGME Psychiatry report which for each diagnosis presents the rate per 100,000 who should see a psychiatrist). The USC data allows calculation of the distribution of encounters and the distribution of time by diagnostic category, but does not identify individual patients. This is particularly a problem in Psychiatry where the predominant diagnoses vary widely by practice setting and where the number of encounters per patient also varies widely by practice setting. An approximation to the distribution of patients by condition was made by selecting only first encounters for the distribution, or by selecting any encounter in one setting in which the next contact was to occur in a different setting. It was hypothesized that this distribution of the number of initial contacts by setting would mirror the number of individual patients by setting.

For the rotational analysis, percentage of time spent in each of the following curriculum categories were abstracted from the ACGME Questionnaire (narrative description of each year of the training program, page 9):

(1) Psychiatry, Inpatient
(2) Psychiatry, Outpatient
(3) Alcohol and Drug Abuse
(4) Emergency Room (Crisis Intervention)
(5) Child and Adolescent Psychiatry
(6) Geriatrics
(7) Neurology

(8) General Medicine (i.e., Internal Medicine, Family Medicine, and Pediatrics.

Unlike rotational data for Family Practice and Obstetrics/Gynecology the Psychiatry rotational data were abstracted from narrative descriptions, and should, therefore, be interpreted with greater caution.

Since the GMENAC projections were based strictly on the major conditions treated in Psychiatry, there is no way to reformat the GMENAC data to assess its congruence with these rotational categories. The greater flexibility of the USC data, however, allows encounters to be at least approximately defined in terms of these rotational domains. As in Family Practice, this was done using a combination of variables from the Patient Encounter section. General Psychiatry was defined as any encounter with a psychiatric etiology (using the "Etiology" variable) except for those encounters with an etiology of "drug dependence/reaction or alcoholism." These latter encounters were counted as corresponding to Alcohol and Drug Abuse rotations. Emergency encounters were those taking place in the Emergency Room or (since not all crisis intervention occurs in that location) all encounters designated as "Emergency" (using the "Urgency of Problem" variable).

Encounters corresponding to Child and Adolescent Psychiatry were all those with patient age less than 18 years and with a psychiatric etiology. Geriatric encounters were those with patients 65 years or older regardless of etiology. Unlike the analysis of patient populations, for the rotational analysis any encounter with a neurological focus was counted in this category -- whether of psychiatric or nonpsychiatric etiology. Similarly, any encounter with a medical or surgical problem type or a nonpsychiatric etiology was counted in the "Medical" category. These broad definitions were used since the medical and neurological training of psychiatrists cuts across conditions and may be relevant across a range of etiologies. The categories used in the rotational analysis are, therefore, not mutually exclusive and represent the number of encounters in which a given problem or dimension of psychiatric practice content was seen.

The final analyses -- using only the USC data -- examined specifically the types of diagnostic and therapeutic procedures used in training versus practice. The following variables were defined from the diagnostic and therapeutic procedure lists of the USC Patient Encounter Section: (1) Psychotherapy which included insight-oriented, supportive, group, family, conjoint, behavioral, sodium amytal interviews or hypnosis. (2) Chemotherapy included the prescribing or administering of antipsychotic agents, lithium, anti-depressants, sedatives, or hypnotics or the testing of drug levels. (3) Neurological diagnostic tests included neurological exams, EEGs, brain scans, CAT scans, X-ray of the skull, lumbar puncture, or other neurological tests. (4) Medical diagnostic tests included general physical exams or any of the following: CBC, Urinalysis, Serology/VD, Blood chemistry, "Panel"-automated (e.g., SMA-12), ECG, X-ray - chest, X-ray - other, Culture, Enzymes, Biopsy, Endoscopy, Glucose tolerance, Liver function, Pulmonary function, Renal function, Thyroid function, Pituitary function, Chromosome analysis, Pap smear, Tests - other.

Although the sample of Psychiatry residents employed in the analyses is small (52 residents with 643 patient encounters) it is nevertheless a probability sample covering the range of residency programs. Thus the results may be generalized to the resident population as a whole within the limits of sampling error which are reflected in the statistical tests employed.

**c. Calculation of Indices in OB/GYN**

In OB/GYN the examination of diagnostic and procedural focus again was based on two types of analysis: an analysis of rotations and an analysis of diagnostic categories. The analysis of diagnostic categories mirrored the framework used in the GMENAC modeling process by examining the following four categories:

- Ambulatory Gynecologic Care
- Hospital Nonsurgical Care

- Obstetric Care
- Surgical Care

Within Ambulatory care, GMENAC used 29 ICDA codes to represent the majority of OB/GYN ambulatory practice as follows:

Infectious and Parasitic Diseases

| | |
|---|---|
| 054 | Herpes simplex |
| C-01 | (090-097) Venereal Disease, Syphilis |
| 098 | Gonorrhea |
| 099 | Other Venereal Disease |
| 112 | Moniliasis |
| R-13 | (130-34, 136) Other Infection and Parasitic Disease, primarily Trichomonas Urogenitalis |

Neoplasms

| | |
|---|---|
| C-02 | (180, 182-4) Malignant Neoplasms, GU Organs Female |
| R21 | Benign Neoplasms (excluding those of digestive tract) |

Endocrine Disorders

| | |
|---|---|
| 258 | Polyglandular Dysfunction and other disease of Endocrine glands |
| 277 | Obesity, Nonendocrine |

Diseases of the Genitourinary System

| | |
|---|---|
| 595 | Cystitis |
| C-12 | (610-11) Chronic Cystic Breast Disease |
| R-57 | (612,614-5) Acute and Unqualified Salpingitis and Oophoritis,and other Diseases of Ovary and Fallopian Tube |
| 616 | Disease of Parametrium and Pelvic Peritoneum |
| NOS | Cervical Dysplasia (Adult Delphi Panel did not address this condition) |
| 620-21 | Cervicitis and Other Diseases of Cervix |
| 622 | Infectious Disease of Uterus, Vagina and Vulva |
| C-14 | (623-5) Non-infectious Disease of Uterus |
| 626 | Disorders of Menstruation |
| 627 | Menopausal Symptoms |
| 628 | Female Sterility |
| (R58) | 629 Other Diseases of Female Genital Organs |

Complications of Pregnancy

| | |
|---|---|
| R-61 | (640, 643) Abortions |
| R-63 | (677-8) Complications of Puerperium |

Symptoms

| | |
|---|---|
| 785 | Symptoms referrable to abdomen and lower gastro-intestinal tract |
| C-17 | (786, 789) Symptoms, Genitourinary System |
| 793 | Observation, w/o need for medical care (possible malignancy) |

Other

| | |
|---|---|
| 401 | Essential Benign Hypertension |
| 460 | Common Cold |

For hospital nonsurgical care, GMENAC modeled the following conditions:

| | |
|---|---|
| 610-11 | Chronic cystic breast disease |
| 620 | Infective diseases of cervix uteri |
| 623 | Utero/vaginal prolapse |
| 622.0 | Infective disease of uterus, except cervix; malposition of uterus; and other diseases of uterus, hyperplasia of endometrium and endometriosis |
| 626.6 | Intermenstrual bleeding |
| 626.0 | Absent menstruation, irregular menstruation, |
| 626.5 | Intermenstrual bleeding and other menstrual disorders; i.e., delayed, infrequent, protracted, retained, vicarious or suppression of menstruation |
| 616.0 | Pelvic inflammatory disease |
| 630-34 | Complications of pregnancy, childbirth and puerperium |
| 180-84 | Malignant neoplasms of female genitourinary organs |

Obstetrical care included deliveries, C-sections, and pre/post-partum care, while surgical care included both performed procedures and pre- and post-operative visits.

Corresponding categories were established for the USC data. The coding categories used are given in Table J. The same exclusions used for GMENAC were used in this analysis which means that obstetrical encounters for females less than 17 years old are not in the analysis. Obstetrical care may, therefore, be slightly under-enumerated. The GMENAC category well care was equated with the

TABLE J

CATEGORIES USED IN COMPARING USC RESIDENTS
WITH CURRENT PRACTICE AND 1990 NORMATIVE PRACTICE

| Variable | Origin |
|---|---|
| I. AMBULATORY, EXCLUDING OB<br>Sex = female, age ≥ 17 look at first, second & third ICDA exclude if any of conditions for OB care are met or if encounter also falls into surgical category | |
| Infectious & Parasitic Neoplasms | ICDA codes: 054, 090-099, 112, 130-134, 136 |
| Nepolasms | |
| Malignant | ICDA codes: 180, 182-184 |
| Other | ICDA codes: 213-218 |
| Endocrine | ICDA codes: 258, 277 |
| Diseases of GU System | |
| Diseases of Menstration, Menopause & Sterility | ICDA codes: 626-628 |
| Other | ICDA codes: 595, 610-612, 614-616, 620-625, 629 |
| Complications of Pregnancy | |
| Abortions, Puerperium | ICDA codes: 642, 643-644, 677-678 |
| Other | ICDA codes: 670-676, 641, 642, 645 |
| Symptoms | |
| GU system | ICDA codes: 786,789 |
| Observation | ICDA codes: 793 |
| Exams without Sickness (exclude codes Y06, Y07, Y10) | ICDA codes: Y00-Y30 |
| Other Ambulatory | |
| Hypertension, Colds, Abdominal Symptoms | ICDA codes: 401, 460, 785 |
| Other (non GMENAC conditions) | All other ambulatory encounters which meet the above exclusions |

TABLE J (CONTINUED)

CATEGORIES USED IN COMPARING USC RESIDENTS
WITH CURRENT PRACTICE AND 1990 NORMATIVE PRACTICE

| Variable | Origin |
|---|---|
| II. HOSPITAL, NONSURGICAL<br>All ages, sex=female look at 1st ICDA code only exclude if encounter falls into OBS or Surgical category select only if primary problem type = 2 (Medical) | |
| GMENAC conditions | ICDA codes: 610, 611, 620, 623, 622.0, 626.0-626.6, 616.0, 630-634, 640-645, 180-184 |
| Other | All other conditions which fit above includions & exclusions but don't fall into obstetric |
| III. OBSTETRIC<br>Select if age $\geq$ 17 look at first, second or third ICDA code. | |
| Deliveries | |
| Complicated | ICDA codes: 651-662 |
| Normal | ICDA codes: 650 or (primary problem type = 9 and not 651-662) |
| Pre/Postpartum Care | |
| High Risk | ICDA codes: 630-639 and encounter loc $\neq$ 4 |
| Other | ICDA codes: 1006, 1007 or (primary problem type = 8, 10 and ICDA $\neq$ 630-639) |
| IV. SURGICAL<br>Examine 1st, 2nd, 3rd ICDA code. Exclude if encounter falls into obstetrics. Any encounter location, all ages, sex=female | |
| Pre/Post Op Care | ICDA codes: Y10 or any procedure code with a fifth digit = 8 (pre-op) or = 10 (post op) |
| Major Gynecological Procedures | (any code below and fifth digit = 9) |
| Biopsy | ICDA codes: A002.4, A002.5 |
| Local excision/lesion of ovary | ICDA codes: S67.1 |
| Oophorectomy/Salpingoophorectomy | ICDA codes: S67.2-S67.5 |
| Salpingectomy, lateral | ICDA codes: S68.1 |
| Salpingectomy, bilateral | ICDA codes: S68.2 |

TABLE J (CONTINUED)

CATEGORIES USED IN COMPARING USC RESIDENTS
WITH CURRENT PRACTICE AND 1990 NORMATIVE PRACTICE

| Variable | Origin |
|---|---|
| **Major Gynecological Procedures (Cont'd)** | |
| Ligation of fallopian tubes | ICDA codes: S68.5 |
| Excision and desctruction of other lesions | ICDA codes: S70.2 |
| Colporrahaphy | ICDA codes: S71.3 |
| Plastic repair of cystocoel and rectocoel | ICDA codes: S71.4 |
| Abdominal Hysterectomy | ICDA codes: S69.1-S69.3 |
| Vaginal Hysterectomy | ICDA codes: S69.4-S69.5 |
| Other major gyn. | ICDA codes: S67.0, S67.6, S67.9,S68.3, S68.4, S68.9, S70.1, S70.0, S70.5, S70.6, S70.7, S70.8, S71.0, S71.1, S71.2, S71.5, S71.7, S71.8, S72.0, S72.1, S72.2, S72.3, S72.5, S72.9 |
| **Minor Gynecological Procedures** | |
| D & C | ICDA codes: S70.3 |
| Conization | ICDA codes: S70.4 |
| Insertion radium | ICDA codes: R001.4 |
| Other minor gyn. | ICDA codes: S68.6, S70.9, S71.6, S71.9 |
| **Obstetric Procedures** | |
| Pregnancy interruption | ICDA codes: S74.6, S74.8, S74.9, S74.7 |
| D & C after delivery | ICDA codes: S78.1 |
| Repair of laceration | ICDA codes: S78.2-S78.3 |
| C-section | ICDA codes: S77.0-S77.9 |
| Induced/Assist | ICDA codes: S75.9-S76.9 |
| Other OB | ICDA codes: S74-S78, excluding 75.0-76.9 |
| Other Surgery | ICDA codes: all S, A, R ICDA codes, NEC |

ICDA Y (or well) codes, except that Y06 and Y07 (pre- and post-partum obstetrical care) were excluded from this category and assigned to obstetrical care. In identifying procedures in the data, it was important in the USC data to distinguish pre- and post-op visits for a procedure from encounters in which the procedure was actually performed. This was done by means of a fifth digit added to the ICDA-8 code in the USC data which allowed this distinction to be made.

Since the large surgical component of OB/GYN makes time a more meaningful unit of analysis than encounters, the USC and GMENAC categories were both expressed as a percentage of time. Since GMENAC projections were based on a mixture of time (for procedures and deliveries) and encounters (for ambulatory care, hospital nonsurgical care, pre- and post-partum obstetrical care, and pre- and post-surgical care) the time per encounter was calculated for all visit data (using the GMENAC weekly encounter and time productivity estimates). Similarly, all GMENAC time-based projections were translated into encounters (on the assumption that a delivery or procedure counted as one encounter). All GMENAC projections could therefore be expressed either as a percentage of time or a percentage of encounters. These calculations are shown in detail in Appendix D-3.

As with Family Practice and Psychiatry the analysis also examined the rotational breakdowns from the ACGME data. This analysis focused on the following specialty areas:

(1) Gynecological
- Endocrinology/Infertility
- Oncology, Radiology, and Pathology
- Gynecological, NOS

(2) Obstetrical
- Maternal-Fetal/High Risk
- Labor and Delivery
- Post-Partum and Ambulatory Obstetrical Care
- Obstetrical NOS

## 2. Development of Indices for Ambulatory Focus

The ambulatory versus inpatient emphasis of a specialty may be calculated as a percentage of time in ambulatory versus inpatient settings, a percentage of ambulatory versus inpatient encounters, or a percentage of ambulatory patients versus inpatients -- each of which may provide a somewhat different view of the specialty. Given the widely different time requirements for ambulatory versus inpatient encounters, the proportion of time spent in various setting would seem to provide the most accurate indication of the emphasis in the specialty. The actual measures used, however, depend upon the data available in the various data sources representing GME, current practice and 1990 normative practice.

GMENAC data on the inpatient and ambulatory components of the specialty are very different for each of the three specialties and will be discussed individually in the following sections. With some assumptions, however, the data could generally be translated into a direct measure of time in a given setting. The data on the ambulatory component of GME were less tractable, however, and as with the measurment of diagnostic and procedural content, translating the ACGME data into quantitative measures of experience at the resident level was a nontrivial task. One indication of the ambulatory versus inpatient focus of training could be obtained by examining the location of the rotational assignments. This task was complicated, however, by the fact that training in any given setting may be accompanied by concurrent training in another setting, making it difficult to calculate time spent in a setting. Furthermore, the location of a rotation is not always clearly indicated on the ACGME forms, adding to the difficulties of obtaining precise measurements of the time spent in ambulatory versus inpatient settings.

The teaching patient descriptions in the ACGME questionnaires also generally present patients or patient encounters in terms of ambulatory versus inpatient settings. Again, this categorization provides only an indirect measure of exposure on a resident level and makes the assumption that resident experience is constant across all teaching patients.

As with the diagnostic and procedural focus of care, the USC Practice Profile data allowed for the most precise characterization of ambulatory versus inpatient emphasis, as both a proportion of time and a proportion of encounters. Percentage of ambulatory encounters was taken from the Week's Practice Summary and was calculated as the proportion of outpatient encounters over total (outpatient plus inpatient) encounters occurring during the week.

Percentage of time in ambulatory settings was calculated from the Activity Overview section (which required responding physicians to record their activities in 15-minute intervals over a three day period). Classified as ambulatory care were the following activities:

- office exams and treatments
- home, industry, or school visits
- OPD or clinic exams and treatments
- emergency room
- extended care facility

(Extended care is sometimes regarded as hospital rather than ambulatory care, but in either case, care in this location is negligible in Obstetrics/Gynecology and Psychiatry; in Family Practice it accounts for 2.3% of all patient encounters.) The non-ambulatory care categories were designated as follows:

- hospital - on wards of floors (including daily rounds)
- hospital - in surgery
- hospital - OB delivery

Using the USC data, the analysis also attempted to obtain a measure of the percentage of ambulatory versus hospital patients similar to those in the ACGME data. No direct measure was possible since the USC data are based on encounters and do not allow individual patients to be distinguished. Depending upon the nature of the data available from the ACGME forms, the analysis used various proxy measures to estimate the proportion of patients in various settings. These measures are described below.

## a. Calculation of Indices in Family Practice

Although the GMENAC specialty-specific projections generally allow for the calculation of an ambulatory versus inpatient focus in terms of encounters and/or time, the General Adult Care Model used to calculate manpower requirements for Family Practice was developed for ambulatory care only. The only projections available from the GMENAC data, therefore, are weekly productivity estimates for ambulatory care for Family Practitioners, without corresponding estimates for inpatient productivity. It is not possible, therefore, to calculate an index of the ambulatory versus inpatient emphasis for 1990 normative practice (although the GMENAC workload estimate of 120 ambulatory encounters per week for Family Practitioner implies a fairly substantial ambulatory component).

The ACGME data and other data describing residency programs themselves (most notably that in the AAFP Directory of Family Practice Residency Programs) provide several means of estimating the ambulatory emphasis. The number of hours per week spent in the Family Practice Center (available from the AAFP Directory) gives a lower bound estimate of the time spent in ambulatory settings. The number of annual patient visits to the Family Practice Center compared with the number of patients admitted to the hospital from the Center (Page 12 of the ACGME questionnaire) also provides a rough approximation of the ambulatory versus inpatient focus. These results cannot be compared directly with the USC data since the first figure is expressed in terms of encounters and the second in terms of patients. However, the USC data for current practice may be translated into a similar index (i.e., the ratio of ambulatory encounters to inpatient admissions) by selecting all encounters in which the next contact was "at hospital admission" (using the Next Contact variable from the patient encounter section). Assuming that the rate of hospital admissions is constant across the entire study period, this index should accurately represent the ratio of admissions to ambulatory encounters across the recording period. In interpreting these comparisons it must be kept in mind that the statistic, admissions from the FP center, describes the program itself and may not necessarily describe the experience of individual residents.

The USC practice profile data was also used to calculate -- for both residents and physicians -- the measures of ambulatory versus inpatient emphasis described above, namely (1) percentage of encounters in ambulatory settings and (2) percentage of time in ambulatory settings.

**b. Calculation of Indices in Psychiatry**

The best measure of ambulatory versus inpatient focus available from the residency program data was the average numbers of outpatients and inpatients treated by residents, totaled over the three years of training (taken from page 6 of the ACGME questionnaire, see Appendix D-1). This measure, however, is based on patients rather than encounters or time. A rough measure of time can be obtained from the narrative description of the psychiatry curriculum (page 9 of the ACGME questionnaire) from which percentage of time in outpatient versus inpatient psychiatry rotations was abstracted.

The ambulatory versus inpatient emphasis is calculated for 1990 normative practice in Psychiatry by using the projected time requirements by practice setting given in the OGME report: Physician Requirements in 1990 for Psychiatry (Table 7). Ambulatory care was defined as that occurring in an ambulatory or partial care setting (since the USC practice profile study classifies all intermediate care as ambulatory) while inpatient care was defined as that occurring in an acute hospital or chronic institutional setting. Similar measures of patient load rather than time were calculated using Table 5 of the report in order to provide direct comparisons with the ACGME case load data.

The USC Practice Profile data provides both measures of ambulatory care based on patient encounters (taken from the Week's Practice Summary) and on time (taken from the Activity Overview). As noted, however, no direct measure of individual patients was available.

### c. Calculation of Indices in OB/GYN

The calculation of the ambulatory versus inpatient focus of care for 1990 normative practice was relatively straightforward. Except for pre/post-partum obstetrical care, the encounter location of care in the GMENAC projections is clearly indicated. For pre/post-partum obstetrical care, the number of visits considered to take place in an ambulatory setting was taken from Table 17 of the OGME report: Physician Requirements - 1990 for Obstetrics/Gynecology. The major effort in calculating the 1990 normative indices of ambulatory versus inpatient emphasis was to transform the projections into comparable units, based on either time or visits. This was done using the method described previously for diagnostic and procedural focus.

The ACGME questionnaires provided little direct information on the setting of care, although an approximate measure was calculated using the ratio of ambulatory visits to inpatient admissions.

## 3. Development of Indices for Teaching, Research and Administrative (TRA) Activities

There are a number of conceptual and practical difficulties in quantifying and comparing non-patient care activities in graduate training to those in current and 1990 normative practice. First, there are a number of different modes in which teaching, research and administration can be performed. All physicians engage in some administrative activities in their practices, a good many do some teaching and research and a small percent engage in teaching, research, and/or administration full time. The kind of preparation necessary for these various levels of non-DPC activity are apt to be quite different. For example, for physicians primarily engaged in DPC, training in administration should be oriented toward practice management. For full-time administrators, administrative experience should be of a qualitatively different type.

To complicate matters further, there need not be exact equivalence in the amount of TRA experience in graduate medical education and teaching and research for congruence to be demonstrated. That is, a physician who becomes a full-time

To complicate matters further, there need not be exact equivalence in the amount of TRA experience in graduate medical education and teaching and research for congruence to be demonstrated. That is, a physician who becomes a full-time administrator will not spend all his/her time in administration during residency training. As with diagnostic and procedural focus, what is required is evidence that a critical level of experience is obtained, i.e., a level of experience that is great enough to prepare the resident for all subsequent practice activities. This will again vary according to the degree to which a physician will engage in TRA activities in subsequent practice. Research can provide important learning experiences for any resident, but a resident who is to become a full-time researcher will require higher levels of training than one who will be primarily involved in direct patient care.

Another problem involved in comparing GME and subsequent practice with respect to teaching, research and administration is that the TRA experiences during residency training are diverse and often occur in conjunction with other training activities. It is, therefore, difficult to identify, isolate, and quantify time spent in TRA alone, let alone identify what types of TRA experiences are being provided. Thus, although the examination of congruence between GME and subsequent practice with respect to non-DPC activities requires making some subtle qualitative and quantitative distinctions, the data in GME are not generally adequate to detect these differences. The GMENAC projections allow TRA activities to be expressed as the proportion of total FTE's required in the specialty. Similarly, the USC data allow TRA to be calculated as a proportion of total professional time. The program-level data on GME, on the other hand, generally indicate only whether teaching, research (and sometimes administrative) experience are required or mandatory. In general, no estimates of the number of residents involved or the amount of time per resident are available from the data, or even more importantly, of the types of activities subsumed under these headings.

For this reason, much of the comparison between GME and current and 1990 normative practice was based on the USC data with its subset of residents. To make these estimates, the Activity Overview section of the USC Log Diary was used. Codes counted as indicated TRA activities are as follows:

- Teaching

  Code 15 - Teaching, other
  Code 16 - Teaching related: Meetings, specific document research, materials
  Code 10 - Teaching Rounds

- Research:

  Code 17 - Research
  Code 18 - Research related: Meetings, fiscal, personnel, specific document analysis

- Administration, Patient-Related

  Code 21 - Patient-Related: charts, billing

- Administration, Management-Related

  Code 22 - Other: Dictating, salesmen, purchasing, personnel and management

As can be seen above, patient-related administrative activities were distinguished from management-related administration since it was felt that the former would pertain to DPC practices whereas the latter would be most characteristic of full-time administrators.

Time spent in TRA activities was calculated as a proportion of total professional activities as defined by codes 1 through 24 of the Activity Overview as follows:

DIRECT PATIENT CARE

1. Office exams and therapy
2. Telephone calls
3. Home, industry or school visits
4. OPD, clinic or CMHC
5. Emergency room
6. Hospital - on wards or floors (incl. daily rounds)
7. Hospital - special techniques (e.g., narcoanalysis, convulsive therapy)
8. Extended care facility (e.g., Halfway house, Nursing home)

9. Detention facility
10. Teaching rounds

OTHER PROFESSIONAL

11. Consultations
12. Supervision of personnel
13. Laboratory and other indirect care
14. Patient education
15. Teaching - other
16. Teaching related: Meetings, specific document research, materials
17. Research
18. Research related: Meetings, fiscal, personnel, specific document analysis
19. Continuing education: National/regional meetings, courses, self-instruction, professional journals, psychoanalytic institutes
20. Personal psychoanalysis or psychotherapy
21. Health-related committee activities
22. Patient-related administration: Charts, billing, insurance forms, lab reports, pharmacy, medical/legal
23. Other administration: Dictating, salesmen, purchasing, personnel and management

PROFESSIONAL

24. Travel: Enroute to hospital, office, meetings, etc.

In the analyses of teaching, research and administrative focus, we attempted to examine first the TRA profile across the whole specialty during training and practice, regardless of whether physicians were or were not primarily engaged in direct patient care. To do this, we looked at the average percentage of time spent by residents and practicing physicians in various activities. Second, we looked at the number of respondents who indicated any time in TRA activities at the time of the USC study. Since the USC activity overview collected data only over a three-day period, it is possible that there were many repondents who normally perform TRA activities but did not do so during the study period. This figure, therefore, provides a lower bound estimate of the numbers of residents and practicing physicians performing various TRA activities.

The analyses of teaching, research, and administration also attempted to examine practice requirements with repect to full-time professional activity in teaching, research, or administration. For practicing physicians, a reasonable

amount of data were available on this subject. Given the lack of detail concerning TRA activities in GME, however, it was difficult to identify residents who might be described as preparing for full-time work in TRA. One approach used was to examine the percentage of residents who, according to the USC Activity Overview, spent at least one-third of their time in TRA during the study period. Given the amount of fluctuation in TRA activity that can occur, this is not an entirely satisfactory solution, but nevertheless may provide a rough approximation of the numbers of residents who are obtaining substantial backgrounds in teaching, research and/or administration. (In calculating this measure, patient-related administration was excluded so that significant administrative experience pertained only to more management oriented activities.)

## a. Calculation of Indices in Family Practice

The estimate of the teaching, research and administration (TRA) component of practice in 1990 was taken from Volume II of the GMENAC final report (page 26) which projects the percentage of FTE's in Family Practice required for this activity. Only the need for physicians involved full time in TRA was projected since the TRA component of the practices of direct patient care physicians was taken into account in the weekly productivity estimates. The projected number of full time physicians needed for TRA in family practice is sizable (amounting to 11.5% of Family Physicians); it is, therefore, of interest to know whether sufficient numbers of residents in Family Practice are receiving the experience in TRA necessary to meet this requirement.

Given the available program data on TRA in Family Practice, the only information available was the number of programs that required research and the number with research opportunities available but not required, taken from the 1982 Directory of Family Practice Residency Programs (AAFP). No reliable information was available from ACGME questionnaires or other sources on the teaching and administrative experiences of Family Practice residents. Using the USC data, however, residents and practicing physicians were compared on the measures described in Chapter 2.

## b. Calculation of Indices in Psychiatry

Although Psychiatrists are projected to spend a large proportion of their professional time in non-patient care activities. The GMENAC model provides no direct estimate of the percentage of time spent in these activities. The GMENAC report in Psychiatry projects that Psychiatrists in 1990 will spend 33.5 hours weekly in patient care activities for 46 weeks per year; however, in forecasting the needed FTE's in psychiatry, time spent in teaching, research and administrative activities was not directly estimated. The present analysis can, therefore, provide only limited insight into the congruence between GME and 1990 normative practice with respect to TRA requirements in Psychiatry.

As noted, the ACGME and other program level data on teaching, research, and administration in Psychiatry is also limited, so the majority of the analyses focused on comparisons of USC residents versus practicing physicians (although the surveys conducted by the AADPRT had relevant information on research and teaching activities). Here the analysis paralleled that described for Family Practice. Time spent in teaching, research and administration was calculated from the Activity Overview in the same manner as described for the specialty.

### c. Calculations of Indices in OB/GYN

Estimates for the proportion of 1990 normative practice devoted to teaching, research, and administration (TRA) were obtained from the GMENAC final report on Obstetrics/Gynecology (Table 16) which projects the required FTEs separately for various patient care activities and teaching, research, and administration. This directly translates into the proportion of total professional time spent in TRA activities.

As in Family Practice and Psychiatry, the ACGME data on TRA in OB/GYN is limited, so that the majority of the analyses focused on comparisons of USC residents versus practicing physicians. The analysis paralleled that described previously for Family Practice and Psychiatry. Time spent in TRA was calculated for the Activity Overview, using the activity codes indicated previously. In OB/GYN, as in Psychiatry, administrative activities were defined as including both patient-related administration (code 21) and management-oriented activities (code 22).

## 4. Development of Indices Describing Use of Nonphysician Providers

Delegated visits are those patient care visits which are handled entirely by nonphysician providers (NPP's). With the advent of New Health Practitioners, the issue of delegation has received increased attention since these personnel (which include Medex, Physician's Assistant, Nurse Practioner, Nurse Midwife, Nurse Obstetrician, etc.) may substantially increase physician productivity

through their ability to manage tasks previously performed only by physicians. Substantial delegation occurs, however, even with more traditional types of nonphysician providers, and, in fact, accounts for the majority of delegated visits given the current shortage of New Health Practitioners. The present study attempted to examine use of both traditional and nontraditional providers.

The GMENAC projections are expressed in terms of the total percentage of visits to the physician which are delegated to his team. This measure most precisely represents the overall use of nonphysician providers, and, as such, was considered of most interest for the comparative analyses. Except for the resident subpopulation of the USC study, however, the available data on graduate medical education provide no direct or indirect measure of the proportion of total encounters which are delegated to NPP's. The second indicator of delegation to NPP's available from GMENAC is derived from Volume VI of the final report which projects the supply of New Health Practitioners by specialty for the year 1990. Using this data the projected supply of NPP's in a specialty can be divided by the projected supply of physicians in the specialty to obtain a physician-to-NPP ratio.

Unlike the first measure, this index does not provide a direct measure of the amount or proportion of delegation in a specialty and covers only New Health Practitioners rather than all allied health providers. Nevertheless, it provides some indication of the delegation potential in a specialty and is also useful for comparison with measures available in the ACGME and other program data. This data, while providing no indication of the magnitude of delegation per se, does give the number of full-time equivalent personnel of various types. By dividing the total number of residents in a program into the total FTE's, a NPP-to-resident ratio may be obtained for various classes of personnel. This index can be compared to the NPP-to-physician obtained from the GMENAC projections. This ratio must, of course, be interpreted cautiously. It does not give any indication of the types of interactions which occur between residents and NPP's or whether residents, in fact, delegate to such NPP's. It does, however, provide some insight into the exposure of residents to NPP's and a high NPP-to-resident ratio may be taken as at least a partial indication that residents are receiving the kinds of experiences conducive to optimum delegation patterns in subsequent practice.

The USC Practice Profile data allow calculation of both the percent of delegated visits in a physician's practice and the physician-to-NPP ratio in the practice. The percent of total visits to the practice which are delegated to NPP's can be calculated from the Week's Practice Summary. This section of the USC survey instrument recorded the number of inpatient and outpatient encounters with the physician as well as the number of patient encounters with other staff only (defined as "face-to-face contacts" in which nonphysician staff provide the total clinical and/or counseling services to patients during a visit). The percentage of delegated visits was calculated as the proportion of visits to other staff only over total visits to the practice, including those to the physician and those to other staff.

The physician-to-NPP ratio was obtained from the questionnaire section of the USC survey instrument (Item G) which records the number of FTE's of various types of nonphysician providers in the practice (see Figure 3). As with the GMENAC projections, a physician-to-NPP ratio was calculated by dividing the total FTE's for NPP's by the total FTE's for physicians in the practice. For each specialty this was done over all the nonphysician providers as a whole and separately for certain types of NPP's. In particular, for Family Practice and Obstetrics/Gynecology separate physician-to-NPP ratios were calculated for traditional and nontraditional NPP's. For Psychiatry, separate calculations were performed for (1) Psychologists and Social Scientists and (2) Social Workers, psychiatric nurses, and other health aides.

Although not directly a measure of delegation, the USC data provides one further measure of interest in this area, namely the percentage of encounters referred to various types of NPP's (taken from the Referral/Consultation variable of the Patient Encounter section of the USC Log Diary). This measure was examined in the comparison of USC residents and practicing physicians.

### a. Calculation of Indices in Family Practice

The measures of delegation to nonphysician providers used in the Family Practice analyses were described in Chapter 2 and include (1) the percentage of visits delegated and (2) the physician-to-NPP ratio. For the USC resident and practicing physician measures, these were taken respectively from the Week's Practice Summary and the personnel grid (item G) of the Questionnaire section. For 1990 normative estimates percentage of visits delegated was taken from Volume II (Table III.A.3) while the physician-to-NPP ratio was taken from Volume VI of the GMENAC report.

Except for the resident subpopulation of the USC study, the available data on GME provide no direct measure of the proportion of total encounters which are delegated to NPP's. The AAFP Directory of Family Practice Residency Program does, however, give the number of full-time equivalent physician extenders which -- by dividing by the total number of residents in the program -- can be transformed into a nontraditional NPP-to-resident ratio comparable to those calculated using GMENAC and USC data. It must be kept in mind, however, that the number of NPP's available in a program is only an indirect measure of the training experiences of residents with respect to NPP's. The number of such personnel available in a program fails to indicate how much delegation takes place or even whether residents work directly with these personnel at all.

### b. Calculation of Indices in Psychiatry

Unlike Family Practice and Obstetrics/Gynecology, the GMENAC model for Psychiatry did not directly examine delegation by Psychiatrists (given the unique relationships that Psychiatrists have to other nonphysician providers). The examination of the relationship between GME in Psychiatry and 1990 normative practice in the use of NPPs is, therefore, limited, being confined to an examination of the ratio of physician extenders to physicians in Psychiatry from Volume VI of the GMENAC final report. The majority of the analysis was instead concerned with assessing congruence between GME and current practice on this dimension.

With respect to current practice, the USC data allows calculation of the same indices described previously for Family Practice. These include (1) a measure of the percentage of total practice visits seen by other staff only (taken from the Week's Practice Summary), (2) the proportion of visits referred to Psychologists, Social Workers, Psychiatric Nurses, or Physician Extenders (taken from the Patient Encounter section), and (3) the NPP-to-physician ratio calculated using the Personnel grid (item G) in the Questionnaire section of the USC diary. For the latter indices, personnel were divided into two types: (1) Psychologists and (2) other aides (including the categories, Social Worker, Psychiatric Nurse, Other Registered Nurse, Assistant trained within your practice, Psychiatric aide, and Community Health aide). This measure was again adjusted for the number of physicians in the practice.

The USC data was analyzed separately for residents and practicing physicians to obtain direct measures of congruence. The latter measure -- i.e., the NPP-to-physician ratio -- was also compared with that taken from the ACGME questionnaire describing the nonphysician professional staff in the residency program (page 3). The numbers of these staff per program abstracted from the questionnaire was divided by the number of residents in the program to obtain a NPP-to-resident ratio. As with the USC data this was done separately for psychologists and other social scientists and for nurses, psychiatric aides and social workers. Again it must be cautioned that these data do not provide any information on the actual relationships of such personnel with residents and so provide only limited insight into the manner in which delegation and referral occur in training.

**c. Calculation of Indices in OB/GYN**

As in Family Practice, the GMENAC data on OB/GYN provides for two separate measures of delegation to nonphysician providers (NPPs). The first is derived from the condition specific service requirements. According to these, delegation occurs for two classes of care: ambulatory nonobstetric care and obstetric care (including a percentage of deliveries as well as pre/post-partum care). With respect to ambulatory, nonobstetric care, Table 19 of the GMENAC

final report of OB/GYN provides condition-specific projections for the number of encounters delegated. The total number of visits delegated was later reduced to 18% by the GMENAC modeling panel in keeping with the projected supply of NPPs (see footnote a of Table 19), and this figure was used in the congruence analyses. To this, was added delegated obstetrical care taken from Table 21 and 22 of the OB/GYN final report. To calculate an overall index of delegation, obstetrical care had to be translated into the same visit units as ambulatory care. The calculations used in performing these operations are given in Appendix C-3.

The second measure available for estimating use of NPP's in 1990 normative practice is that derived from Volume VI of the GMENAC final report which projects the specialty distribution of nurse practitioners. As in Family Practice, the projected supply of NPP's was divided by the projected supply of OB/GYN specialists to obtain an NPP-to-physician ratio.

The USC practice profile data again allows two comparable measures: (1) percent of the total practice visits which are delegated (taken from the Week's Practice Summary) and (2) the NPP-to-physician ratio (calculated from Item G of the Questionnaire section). These were defined in terms of the following categories:

- nontraditional
  - MEDEX
  - Nurse Practitioner
  - Physician's Assistant

- traditional
  - Assistant trained within the practice
  - Registered Nurse
  - Surgical technician
  - LPN or LVN
  - Community Health Aide

The ACGME questionnaire provided little data on exposure to NPP's, although the number of Nurse Obstetricians/Practitioners/Midwives trainees in the program (taken from page 3) was used to calculate an NPP-to-resident ratio. Again, this measure cannot indicate the quantity and quality of the interactions between residents and these NPP trainees.

## APPENDIX A-5

## PANEL REVIEW OF EMPIRICAL FINDINGS

The preliminary activity of the project involved the design and calculation of indices, enabling comparisons to be made among residency training, current practice, and 1990 normative practice. Once this phase of the study was completed, the initial set of results was reviewed by a panel of experts in the field of graduate medical education. This panel consisted of representatives from the American Academy of Family Physicians, the American Psychiatry Association, the American College of Obstetricians and Gynecologists, the American Board of Medical Specialties, the American Medical Association, the Council of Medical Specialty Societies, the American Hospital Association, and the Association of American Medical Colleges.

The panel meeting was held on October 26 and 27, 1982 with the agenda covering: (1) a discussion of the study's methodology, (2) specific findings in Family Practice, (3) specific findings in Psychiatry, (4) specific findings in Obstetrics/Gynecology and (5) conclusions and recommendations. Panelists were given in advance a draft report which included a discussion of the methodology, tables showing the various indices calculated from the data, and a brief discussion describing the apparent results. The purpose of the meeting was to examine these findings, discuss their validity and significance and identify their implications for graduate medical education. In addition, panelists were asked to identify areas in which further research was necessary or valuable.

The panel's interpretations of specific findings are presented in Chapter 3, Results, whereas the final chapter Summary and Conclusions synthesizes and outlines the major conclusions reached by the panel in the areas of discussion.

# APPENDIX B

## SUPPLEMENTARY MATERIALS FOR FAMILY PRACTICE

APPENDIX B-1

ACGME FORM

American Medical Association
Council on Medical Education
535 North Dearborn Street, Chicago, Illinois 60610

# RESIDENCY IN FAMILY PRACTICE

Date of Application _____

I. Title of Program _____

_____

Type of Hospital(s):
Community _____
Government _____
University _____
Proprietary _____

Present Status of Approval: Full ____ Probationary ____ Provisional ____ Application ____

Name of Program Director: _____

Address: _____
Street City State Zip

Telephone: Area Code ____ Number _____ Extension _____

II. Parent Hospital _____

If more than one hospital is used for inpatient training, use pp. 4 and 5 to provide required information for the additional hospitals.

Address: _____
Street City State Zip

Hospital Administrator: _____

D.M.E.: _____

Hospital Statistics Date _____

| | | | |
|---|---|---|---|
| Total number of beds | _____ | Positions offered | _____ |
| Average daily census | _____ | Number filled | _____ |
| Percentage of male patients | _____ | Number foreign graduates | _____ |
| Autopsy percent | _____ | | |

House Staff in All Programs

The data given above should be for the most recently completed fiscal or calendar year and the date given should be for whichever is appropriate.

## INSTRUCTIONS

COMPLETE ALL PARTS IN TRIPLICATE. IT IS ESSENTIAL THE INFORMATION BE PROVIDED IN AN EXPLICIT AND SUCCINCT FORM. CLARITY IS VITAL. IF YOUR REMARKS NEED TO BE EXTENDED, PLEASE USE ADDITIONAL SHEETS AND BE SURE TO INDICATE ON THEM THE NUMBER OF THE SECTION TO WHICH YOU REFER. USE ONLY THE FORMS PROVIDED. CLEAR COPIES OF THE SAME MAY BE USED WHEN NECESSARY. DO NOT INCLUDE ANY OTHER MATERIAL.

Curriculum Vitae of Program Director:

Please summarize this information below and include medical education, post-graduate training, teaching and practice experience, and appointments, honors, awards and publications.

III. Staffing Information: Parent Hospital

| | No. M.D. on Staff | No. Who Are Board Certified | Is Chief of Service Full, Part-time or Voluntary? | Is There a Residency Operating in This Specialty? | No. of Residents |
|---|---|---|---|---|---|
| FAMILY PRACTICE | | | | | |
| INTERNAL MEDICINE | | | | | |
| OBSTET.-GYNECOL. | | | | | |
| PEDIATRICS | | | | | |
| PSYCHIATRY | | | | | |
| SURGERY | | | | | |

Please diagram the medical staff organizational structure

Inpatient and Outpatient Information

| | INPATIENT | | | OUTPATIENT | |
|---|---|---|---|---|---|
| | No. of Beds | No. of Annual Disch. | Is this service utilized in the teaching of Family Practice residents? | No. of Patient Visits per Month | Does the Family Practice Resident Serve in these Clinics? |
| FAMILY PRACTICE | | | | | |
| INTERNAL MEDICINE | | | | | |
| OBSTET.-GYNECOL. | | | | | |
| PEDIATRICS | | | | | |
| PSYCHIATRY | | | | | |
| SURGERY | | | | | |

Indicate for any service to which Family Practice patients may be admitted the degree of responsibility for their care assumed by the Family Practice Residents.

Participating Hospital(s)

Name of Hospital _____

Address _____
Street City State Zip

Telephone: Area Code _____ Number _____ Extension _____

Hospital Administrator: _____

D.M.E.: _____

Hospital Statistics Date _____ Type of Hospital: _____

Total number of beds _____
Average daily census _____
Percentage of male patients _____
Autopsy percent _____

These data should be for the most recently completed fiscal or calendar year, and the date should be for whichever is appropriate.

Staffing Information

| | No. M.D. on Staff | No. Who Are Board Certified | Is Chief of Service Full, Part-time or Voluntary? | Is There a Residency Operating in This Specialty? | No. of Residents |
|---|---|---|---|---|---|
| FAMILY PRACTICE | | | | | |
| INTERNAL MEDICINE | | | | | |
| OBSTET.-GYNECOL. | | | | | |
| PEDIATRICS | | | | | |
| PSYCHIATRY | | | | | |
| SURGERY | | | | | |

Inpatient and Outpatient Information

| | INPATIENT | | | OUTPATIENT | |
|---|---|---|---|---|---|
| | No. of Beds | No. of Annual Disch. | Is this service utilized in the teaching of Family Practice Residents? | No. of Patient Visits/ Month | Does the Family Practice Resident Serve in these Clinics? |
| FAMILY PRACTICE | | | | | |
| INTERNAL MEDICINE | | | | | |
| OBSTET.-GYNECOL. | | | | | |
| PEDIATRICS | | | | | |
| PSYCHIATRY | | | | | |
| SURGERY | | | | | |

Indicate for any service to which Family Practice patients may be admitted the degree of responsibility for their care assumed by the Family Practice Residents.

If more than two hospitals are included in this program, please copy as many of these sheets as necessary to supply the above information for each.

## Emergency Room Service

1. List the staff who teach the residents in family practice in the emergency room. Indicate in appropriate area whether F=Full-time, P=Part-time, V=Voluntary.

| Name, degree | Years of Graduate Training | If certified, give name of Board and date | F, P, V | Hours per week in teaching program |
|---|---|---|---|---|
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2. Is a supervisory physician on duty 24 hours a day? Yes _____ No _____

3. Describe briefly the amount of space, the number of rooms, and the major items of equipment in the emergency room.

4. Number of visits annually _____. Approximately how many of these are for true acute emergencies? _____

5. Outline your educational program for family practice residents in the emergency room. Please clearly define their responsibilities and how and by whom they are supervised and taught.

_____, M.D.
Signature, Chief, Emergency Room Service

If more than two hospitals are included in this program, please copy as many of these sheets as necessary to supply the above information about each.

Family Practice Program - Basic Staff Information

The questions that follow apply to your whole program, even if it includes more than one institution.

Is there an autonomous department or division of family practice?

Yes _____ No _____. If no, please explain briefly how the family practice program operates.

. Give the number of family physicians who participate in the residency program and the number of them who are Board Certified _____.

. What is the number of residency positions in family practice currently offered and filled?

| | Number Offered | Filled-U.S. Grad. | Foreign Grad. |
|---|---|---|---|
| First year | _____ | _____ | _____ |
| Second year | _____ | _____ | _____ |
| Third year | _____ | _____ | _____ |

☐ Not applicable, new program

4. Does the family practice program have full representation at the staff executive level? Yes _____ No _____. If no, please explain.

. Does the family practice group have the complete responsibility for the goals and design of its educational program?

5. If this is not a medical school program, do you have an official relationship with a medical school? If so, describe briefly.

Please indicate by (x) in the appropriate space, if the family practice resident receives significant instruction and experience in the following disciplines or areas of knowledge. The space designated "Other" may be used to indicate activities outside your own facilities. This section may be expanded in the "Remarks" section below. Where no instruction is received, leave spaces blank. If more than one hospital is involved, these queries apply to the entire program.

| | In-Patient | Out-Patient | Family Practice Center | Lecture | Elective | Other |
|---|---|---|---|---|---|---|
| Intensive Care Unit | | | | | | |
| Coronary Care Unit | | | | | | |
| Cardiopulmonary Resuscit. | | | | | | |
| Electrocardiography | | | | | | |
| Inhalation Therapy | | | | | | |
| Anesthesiology | | | | | | |
| Immunology | | | | | | |
| Genetics | | | | | | |
| Neonatology | | | | | | |
| Growth and Development | | | | | | |
| Nutrition and Dietary Care | | | | | | |
| Toxicology | | | | | | |
| Pharmacology | | | | | | |
| Preventive Medicine | | | | | | |
| The family as a social unit | | | | | | |
| Human Sexuality | | | | | | |
| Physical Medicine | | | | | | |
| Rehabilitation | | | | | | |
| Biostatistics | | | | | | |
| Office Laboratory Studies | | | | | | |
| Community Resources | | | | | | |
| Medical Ethics | | | | | | |
| Medical-legal Problems | | | | | | |
| Office Management | | | | | | |

Remarks:

Family Practice Center (Model F.P. Unit)

Name of Center _____ Director _____

Address _____
Street City State Zip

Telephone: Area Code ____ Number _____

Location of Center in relation to parent hospital _____

_____ and laboratory and x-ray facilities _____

Please indicate the approximate percentage of income from fees _____, grants _____, parent institution _____, other _____.

What are the sources for the families that will be cared for in the Center? _____

What is the number of families assigned to each resident in the

first year _____ second year _____ third year _____

Daily average of all encounters with family practice patients _____

Please describe laboratory and/or x-ray facilities that may be situated in the Center. List other items of major equipment located in the Center.

What kind of patient record system is employed in the Center? Are these records always immediately available in the Center?

What are the hours of operation of the Center? _____. Does the resident have access to the Center and its records at other times _____. How do family practice patients obtain care when the Center is closed?

Supporting Staff:

Nursing ____ _____ Clerical _____
Technical _____ Other _____

If more than one Center is included in this program, please make as many copies of pages 8-12 as is necessary to supply the information about each.

Family Practice Center

List no more than 25 of the most active members of the staff who serve in the Center on a regular basis. In the case of specialists in other disciplines, list only those who consistently serve the Center. In listing those certified, place an R before the name of the Board, if re-certified.

| Name, degree | Name of Board if Certified | Hours in Center per year | Hours in Prgm. outside of Center/yr. | Nature of duties in Center (Chief, attend. physician, consultant, etc.) |
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Total number of other physicians who serve in the Center

Certified _____

Not Certified _____

Describe the way supervision and teaching of the residents is conducted during their hours in the Center.

Family Practice Center (continued)

Indicate how specialists from other services are available to the Center for consultation and teaching. Do you feel these arrangements consistently work well? If not, please explain.

How does a resident arrange for hospitalization of his Center patients and how closely does he follow them there? How is he supervised?

Do the family practice residents make home visits? If so, approximately how many each month? How is he supervised?

Family Practice Center (continued)

Please submit on this page a floor plan of the Center, and label each room to indicate its function. How many square feet of floor space are there in the Center? _____ sq. ft.

Family Practice Center (continued)

This sheet only is for programs that have been in operation two years or more. We are interested in your observations and experiences in operating your Center. Any pertinent information not asked for may be included under "Remarks."

Number of patient visits to the Center in the last year _____.

Please describe what you have found in respect to the family and social characteristics of your Center patients:

Describe in general terms the diagnostic categories that predominate in your patients:

Number of home or extended care visits in last year _____.

Number of patients admitted to hospital from Center in last year _____.

In the past three years how many residents have:

entered your program _____
completed your program _____
dropped from your program _____
How many are certified _____

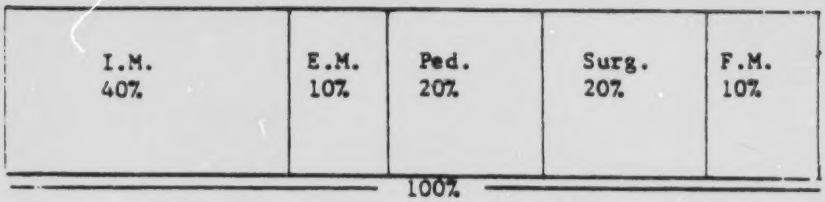
REMARKS:

Curriculum in Family Practice

Below will be found three rectangular areas to be used to illustrate the distribution of time in each of the three years. Each year should be divided in a way that will show the percentage of time spent in each area of instruction. The major specialty areas and their abbreviations are: internal medicine (I.M.), surgery (Surg.), pediatrics (Ped.), psychiatry (Psy.), obstetrics and gynecology (Obg.), family medicine (F.M.), community medicine (C.M.), emergency medicine (E.M.), electives (Elect.). Others not mentioned should be given understandable abbreviations.

The example below indicates how this diagram should be completed. However, this is only an example, not an indication how a year should be designed.

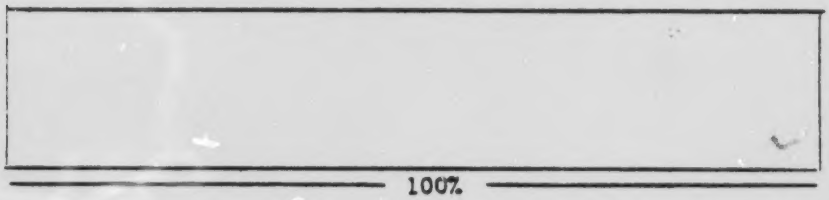
Example
1st year




Hours per week in Family Practice Center: 4

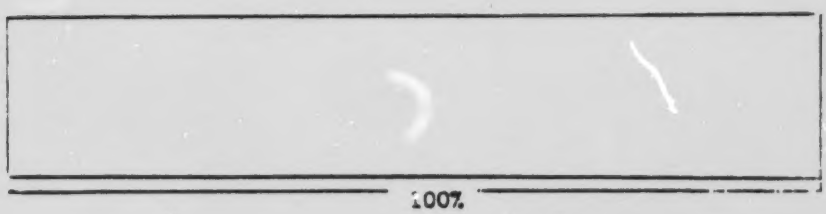
YOUR PROGRAM

1st year



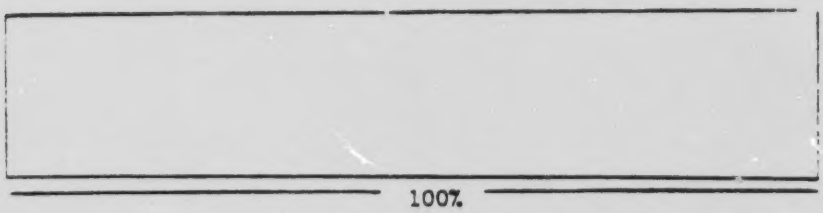

Hours per week in Family Practice Center: _____

2nd year




Hours per week in Family Practice Center: _____

3rd year




Hours per week in Family Practice Center: _____

Curriculum in Family Practice

Please describe briefly how and where each individual diagrammed segment of time on Page 13 is spent and under whose supervision and direction. The statements should give a clear idea of the educational content of each segment. Use this and the following page and arrange in proper sequence.

Curriculum in Family Practice (continued)

Goals and Objectives

Please state the concepts, goals and specific objectives for your program in Family Practice.

Research

a. Do any family practice residents carry on a research project, either individually, or in association with a faculty member?

b. List any active, ongoing research projects filling the qualifications listed in "a" above. Give the names of the individuals concerned.

c. List any publications in the last three years of research studies in which family practice residents have played a significant role.

Academic Achievements of Staff

List below the academic achievements of the Family Practice staff in the last two years (publications, appointments, honors, etc.). Do not enclose reprints.

## Conferences

List the regular conferences such as Staff, Death, CPC, Journal Club, Specialty Conferences, etc. that are considered to be a part of the family practice residency program, including those in the Family Practice Center.

Indicate after each conference whether it is required throughout the year (R), required when on that service (RS), or optional (O).

| Conference | R,RS,O | Frequency | Person(s) who conduct conference |
|---|---|---|---|
| | | | |
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Residents in Family Practice Program

New applications need only number offered for each year - omit remainder.

| | First Year | Second Year | Third Year |
|---|---|---|---|
| Residencies offered | | | |
| Residencies filled | | | |
| Stipend | | | |

| Name | Date Began | Medical School of Grad. and date | Previous Graduate Training |
|---|---|---|---|
| First Year | | | |
| Second Year | | | |
| Third Year | | | |
| Fourth Year. If offered, describe: | | | |

## Family Practice Training in Internal Medicine

a. List the members of this department who contribute 25 hours or more per year in teaching or consultation with family practice residents.
(F=full time, P=part-time salaried, V=volunteer)

| Name, degree; indicate any subspecialty | Years of graduate training | F,P,V | If certified give name of Board and date | Hours in program per year |
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b. Describe the objectives of your teaching program in internal medicine for family practice residents, including those special skills to be learned.

c. In what subspecialty fields of internal medicine is consultation and training always available for residents in family practice? Indicate whether inpatient, outpatient, or both.

d. Describe the inpatient experience of family practice residents in this field. Include how they relate to residents and staff in internal medicine and the way the teaching and supervision of family practice residents is conducted.

e. Does this department provide readily available consultative and teaching service to the Family Practice Center? Please describe how this is accomplished.

_____ M.D.

Signature, Chief of Medical Service

## Family Practice Training in Pediatrics

. List the members of this department who contribute 25 hours or more per year in teaching or consultation with family practice residents.
(F=Full time, P=Part-time salaried, V=Volunteer)

| Name, degree; indicate any subspecialty | Years of graduate training | F, P, V | If certified give name of Board and date | Hours in program per year |
|---|---|---|---|---|
| | | | | |
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. Describe the objectives of your teaching program in Pediatrics for family practice residents, including any special skills to be learned.

c. In what subspecialty fields of pediatrics is consultation and training always available for family practice residents? Indicate whether inpatient, outpatient, or both.

d. Describe the inpatient experience of family practice residents in this field. Include how they relate to the residents and staff in pediatrics and the way the teaching and supervision of family practice residents is conducted.

e. Does this department provide readily available consultative and teaching service to the Family Practice Center? Please describe how this is accomplished.

_____ M.D.
Signature, Chief of Pediatric Service

## Family Practice Training in Psychiatry and Behavioral Science

a. List the members of this department who contribute 25 hours or more per year in teaching or consultation with family practice residents.
(F=Full time, P=Part-time salaried, V=Volunteer)

| Name, degree; indicate any subspecialty | Years of graduate training | F, P, V | If certified give name of Board and date | Hours in program per year |
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b. Describe the objectives of your teaching program in Psychiatry and Behavioral Science for family practice residents, including any special skills to be learned.

c. Is your teaching program for family practice residents conducted in an outpatient setting, an inpatient service, or both? If any inpatient teaching is included please describe the kind of patients cared for by the family practice residents and the objectives of this teaching.

d. Please describe how your teaching of family practice residents with patients is conducted, and any other kinds of teaching exercises your department provides for them.

e. Does your department provide readily available consultative and teaching service to the Family Practice Center? Please describe how this is accomplished.

_____, M.D.

Signature, Chief of Psychiatry Service

## Family Practice Training in Obstetrics-Gynecology

a List the members of this department who contribute 25 hours or more per year in teaching or consultation with family practice residents.
(F=full time, P=part-time salaried, V=volunteer)

| Name, degree; indicate any subspecialty | Years of graduate training | F,P,V | If certified give name of Board and date | Hours in program per year |
|---|---|---|---|---|
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b Describe the objectives of your teaching program in obstetrics and gynecology for family practice residents, including any special skills to be learned.

c. Does the family practice resident have inpatient experience in obstetrics and does he perform deliveries? If so, approximately how many and how is he taught and supervised in the delivery room? How does he relate to the residents in this specialty.

d. Describe the teaching and training program in gynecology for family practice residents. Where does this take place and how is the resident taught and supervised?

e. Does this department provide readily available consultative and teaching service to the Family Practice Center? Please describe how this is accomplished.

_____

Signature, Chief of Obstetrics-Gynecology Service

## Family Practice Training in Surgery

a. List the members of this department who contribute 25 hours or more per year in teaching or consultation with family practice residents.
(F=Full time, P=Part-time salaried, V=Volunteer)

| Name, degree; indicate any subspecialty | Years of Graduate training | F, P, V | If certified give name of Board and date | Hours in program per year |
|---|---|---|---|---|
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b. Describe the objectives of your teaching program in surgery for family practice residents. What particular surgical skills do you wish to teach them?

c. Do family practice residents have inpatient experience in surgery? If so, please describe and explain briefly how they relate to the surgical residents and how they are taught and supervised.

d. Describe the nature, extent and kind of supervision provided for any operative procedures that may be performed by the family practice resident.

e. Does the department provide readily available consultative and teaching service in the Family Practice Center? Please describe how this is accomplished.

_____, M.D.

Signature, Chief of Surgery Service

## Family Practice Training in Other Specialties

Describe concisely any special teaching and training the residents in family practice receive in the listed specialties. Also, please indicate how these specialties may contribute consultative and teaching service in the Family Practice Center.

a. Ophthalmology:

b. Otolaryngology:

c. Dermatology:

d. Neurology:

e. Infectious Disease and Antibiotic Therapy:

f. Urology:

g. Orthopedics:

Radiology

Describe the means by which family practice residents gain experience in the interpretation of x-ray studies commonly encountered in family practice. Who gives this instruction?

How are x-ray films of patients cared for in the Family Practice Center reviewed with the resident?

Nuclear Medicine

List the diagnostic and therapeutic nuclear medicine procedures at your hospital which are regularly available to the family practice residents.

Pathology and Clinical Pathology

Describe the ways in which pathology and laboratory medicine (clinical pathology) are available for study to the family practice resident. Does he have an opportunity to see and review autopsies from his own as well as other services? If there is a death conference, how is it conducted?

Evaluation

How is the effectiveness of your program as a teaching and learning experience evaluated? How do you measure the progress of your resident staff? How is your teaching staff evaluated?

Electives

List the electives regularly available to family practice residents. Give a very brief description of the content, duration and place where the elective is given. Indicate who is responsible for teaching each elective.

APPENDIX B-2

SAMPLE PAGES FROM THE USC
PRACTICE PROFILE LOG DIARY:

a) Week's Practice Summary

b) Activity Overview

c) Patient Encounter Section

d) Questionnaire: Training and
Ancillary Personnel

| DAY OF THE WEEK | TELEPHONE CALLS WITH HEALTH PROFESSIONALS | TYPES OF PATIENT ENCOUNTERS | | | | TOTAL PROFESSIONAL HOURS (Excluding On Call) |
|---|---|---|---|---|---|---|
| | | TELEPHONE CALLS WITH PATIENTS | PATIENTS SEEN BY YOU: OUTPATIENTS | PATIENTS SEEN BY YOU: INPATIENTS | PATIENTS SEEN BY OTHER STAFF ONLY | |
| SUNDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| MONDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| TUESDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| WEDNESDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| THURSDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| FRIDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| SATURDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |

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*Estimate the total number of outpatients/inpatients you personally see during a typical week. If you do not normally see patients, record "0".* ☐

PART I: WEEK'S PRACTICE SUMMARY



123

/ /
Mo. Day Yr.
Date

**INSTRUCTIONS** For each time interval, select the ONE Activity Code on the right that best describes your activities during that period. Use arrows to indicate activities continued through more than one interval. Insert today's date in the space provided.

| BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE |
|---|---|---|---|---|---|---|---|
| Midnight | | AM 6:00 | | Noon | | PM 6:00 | |
| AM 12:15 | | AM 6:15 | | PM 12:15 | | PM 6:15 | |
| AM 12:30 | | AM 6:30 | | PM 12:30 | | PM 6:30 | |
| AM 12:45 | | AM 6:45 | | PM 12:45 | | PM 6:45 | |
| AM 1:00 | | AM 7:00 | | PM 1:00 | | PM 7:00 | |
| AM 1:15 | | AM 7:15 | | PM 1:15 | | PM 7:15 | |
| AM 1:30 | | AM 7:30 | | PM 1:30 | | PM 7:30 | |
| AM 1:45 | | AM 7:45 | | PM 1:45 | | PM 7:45 | |
| AM 2:00 | | AM 8:00 | | PM 2:00 | | PM 8:00 | |
| AM 2:15 | | AM 8:15 | | PM 2:15 | | PM 8:15 | |
| AM 2:30 | | AM 8:30 | | PM 2:30 | | PM 8:30 | |
| AM 2:45 | | AM 8:45 | | PM 2:45 | | PM 8:45 | |
| AM 3:00 | | AM 9:00 | | PM 3:00 | | PM 9:00 | |
| AM 3:15 | | AM 9:15 | | PM 3:15 | | PM 9:15 | |
| AM 3:30 | | AM 9:30 | | PM 3:30 | | PM 9:30 | |
| AM 3:45 | | AM 9:45 | | PM 3:45 | | PM 9:45 | |
| AM 4:00 | | AM 10:00 | | PM 4:00 | | PM 10:00 | |
| AM 4:15 | | AM 10:15 | | PM 4:15 | | PM 10:15 | |
| AM 4:30 | | AM 10:30 | | PM 4:30 | | PM 10:30 | |
| AM 4:45 | | AM 10:45 | | PM 4:45 | | PM 10:45 | |
| AM 5:00 | | AM 11:00 | | PM 5:00 | | PM 11:00 | |
| AM 5:15 | | AM 11:15 | | PM 5:15 | | PM 11:15 | |
| AM 5:30 | | AM 11:30 | | PM 5:30 | | PM 11:30 | |
| AM 5:45 | | AM 11:45 | | PM 5:45 | | PM 11:45 | |

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## ACTIVITY CODES:

PATIENT CARE
1. Office exams and treatments
2. Telephone calls
3. Home, industry, or school visits
4. OPD or clinic exams and treatments
5. Emergency room
6. Hospital - on wards or floors (incl. daily rounds)
7. Hospital - in surgery
8. Hospital - OB delivery
9. Extended care facility (Nursing home)
10. Teaching rounds

OTHER PROFESSIONAL
11. Consultations
12. Supervision of personnel
13. Laboratory and other indirect care
14. Patient education
15. Teaching - other
16. Teaching related: Meetings, specific document research, materials
17. Research
18. Research related: Meetings, fiscal, personnel, specific document analysis
19. Continuing education: National/regional meetings, courses, self-instruction, professional journals
20. Health-related committee activities

ADMINISTRATION
21. Patient related: Charts, billing, insurance forms, lab reports, pharmacy, medical/legal
22. Other: Dictating, salesmen, purchasing, personnel and management

PROFESSIONAL TRAVEL
23. Travel: Enroute to hospital, office, meetings, etc.

OTHER
24. On call (use only if you are on call and one of the other codes in this list is not applicable)
25. Completion of this survey instrument
26. Civic activities, service clubs
27. Personal - not on call

## A. YOUR MEDICAL EDUCATION AND CURRENT SPECIALTIES

AM Aerospace Medicine
A Allergy
AN Anesthesiology
BE Broncho-Esophagology
CD Cardiovascular Diseases
CIM Clinical Immunology
CPH Clinical Pharmacology
D Dermatology
DIA Diabetes
EM Emergency Medicine
END Endocrinology
EPI Epidemiology
FP Family Practice
GE Gastroenterology
GP General Practice
GPM General Preventive Medicine
GER Geriatrics
GEN Genetics
GYN Gynecology
HEM Hematology
HYP Hypnosis
ID Infectious Diseases
IM Internal Medicine
LAR Laryngology
ND Neoplastic Diseases
NEP Nephrology
N Neurology
CHN Neurology, Child
NM Nuclear Medicine
NTR Nutrition
OBS Obstetrics
OBG Obstetrics and Gynecology
OM Occupational Medicine
ONC Oncology
OPH Ophthalmology
OST Osteopathy
OT Otology
OTO Otorhinolaryngology
CLP Pathology, Clinical
FOP Pathology, Forensic
PD Pediatrics
PDA Pediatric Allergy
PDC Pediatric Cardiology
PM Physical Medicine and Rehabilitation
P Psychiatry
CHP Psychiatry, Child
PYA Psychoanalysis
PYM Psychosomatic Medicine
PH Public Health
PUD Pulmonary Disease
R Radiology
PDR Radiology, Pediatric
TR Radiology, Therapeutic
DR Roentgenology, Diagnostic
RHU Rheumatology
RHI Rhinology
ABS Surgery, Abdominal
CDS Surgery, Cardiovascular
CRS Surgery, Colon and Rectal
GS Surgery, General
HS Surgery, Hand
HNS Surgery, Head and Neck
NS Surgery, Neurological
ORS Surgery, Orthopedic
PDS Surgery, Pediatric
PS Surgery, Plastic
TS Surgery, Thoracic
TRS Surgery, Traumatic
U Surgery, Urological

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1. Year of birth 19

*We need the most current information obtainable regarding your education and specialties. Refer to the list of medical and surgical specialties (see left) and select the code(s) which best describes your professional commitments. For example, if "Allergy" applies to you, record "A". If your specialty is not listed, print it in the space(s) provided for Specialty Code.*

2. Current Specialties

| Specialty | Specialty Code (use code at left) | Percent of Professional Time | Years of Practice in This Specialty |
|---|---|---|---|
| a. Primary | | % | |
| b. Secondary | | % | |
| c. All other | | % | |

Total = 100%

3. Education/Training

a. I received my medical degree from

_____
(name of medical school)

in 19

b. *(In responding to this question, insert the appropriate specialty codes, shown on the left, in the boxes provided below. If none, leave the boxes blank.)*

(1) I had at least one full year of residency training in:

☐ ☐ ☐

(2) I have completed residency training requirements for certification in:

☐ ☐ ☐

(3) I am board (or sub-board) certified in:

☐ ☐ ☐

## G. PERSONNEL AND HOURS WORKED

1. For each type of personnel employed at your principal office, indicate the number of individuals employed and the number of hours per week they spend at that location. For example, if your practice employs one Registered Nurse who works 40 hours per week and three Registered Nurses who work 20 hours per week, then to the right of "Registered Nurse" you would place a "1" in the column headed "35-40" and a "3" in the column headed "20-24".

| Types of Personnel | Number of Hours Per Week | | | | |
|---|---|---|---|---|---|
| | Under 20 | 20-24 | 25-34 | 35-40 | Over 40 |
| Physician | | | | | |
| MEDEX-type program | | | | | |
| Nurse Practitioner (formally trained) | | | | | |
| Physician's Assistant (formally trained) | | | | | |
| Assistant trained within your practice | | | | | |
| Registered Nurse | | | | | |
| Lab or X-ray Technician | | | | | |
| Surgical Technician | | | | | |
| LPN or LVN | | | | | |
| Community Health Aide | | | | | |
| Secretary/Receptionist | | | | | |
| Other: _____ (Specify) | | | | | |

2. If you do not currently use a formally trained Medex, Nurse Practitioner, or Physician's Assistant in your practice, would you do so if such highly trained personnel were available? CHECK ONE:

a. ☐ Yes b. ☐ No

If yes, which type would you prefer in your practice? CHECK ALL THAT WOULD BE SUITABLE:

c. ☐ Medex d. ☐ Nurse Practitioner e. ☐ Physician's Assistant (Associate)

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**PLEASE REVIEW INSTRUCTIONS BEFORE STARTING**

| ENCOUNTER LOCATION | | | |
|---|---|---|---|
| 1. Office | 5. Emergency Room | 8. Home | |
| 2. OPD | 6. Extended Care Facility (Nursing Home) | 9. Other | |
| 3. Clinic | | | |
| 4. Hospital | 7. Industry/School | | |

| PRIMARY PROBLEM TYPE | | |
|---|---|---|
| 1. Preventive | 5. Medical & Surgical | |
| 2. Medical | 6. Obstetrical | |
| 3. Surgical - minor | 7. Psycho/Social | |
| 4. Surgical - major | 8. Environmental/Economic | |

Tear off here

Staff may complete this section

Use numbers from Coding Key

| PATIENT ID | Line Number | ENCOUNTER DATE and TIME | PATIENT & ENCOUNTER CHARACTERISTICS | | | | | | | PATIENT'S PROBLEM(S) | | | | DIAGNOSTIC PROCEDURES | THERAPEUTIC PROCEDURES | ENCOUNTER CLASS | | STATUS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mo. Day Yr. Date / Time in Minutes | Location (use one of the above codes 1-9) | Age: Estimate to nearest year; "0" = under one year | Sex: 1. Male 2. Female | Seen patient before? 1. Yes 2. No | Regular patient? 1. Yes 2. No | 1. Self/Patient 2. Agency 3. Physician | Patient Source: This patient? 1. Yes 2. No; Patient's family? 1. Yes 2. No; 4. Consult | Majority of Care: 3. Undetermined | Your Role: 1. Provide 2. Assist 3. Undetermined | Number of visits for this problem | Type/use one of the above codes 1-8) | Primary: Focus / Etiology (Dx) | Other: Focus / Etiology (Dx) | Other: Focus / Etiology (Dx) | Record all procedures you ordered, performed or interpreted during this encounter. If None record "1". Circle those procedures you ordered but did not perform or interpret. | Record all procedures you ordered or performed during this encounter. If None record "1". Circle those procedures you ordered but did not perform. | Complexity of service / Severity of problem | Urgency of problem / Your next contact | Referral/Consultation |
| Your Use Only | 036 | Primary Dx (Print) | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 037 | Primary Dx (Print) | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 038 | Primary Dx (Print) | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 039 | Primary Dx (Print) | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 040 | Primary Dx (Print) | | | | | | | | | | | Other Dx (Print) | | | | | | | |

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# CODING KEY

## FOCUS

1 Well patient

2 Skin, incl. nails, hair
3 Head/Neck

4 Eyes
5 Ears
6 Nose
7 Mouth/Throat

8 Breasts

9 Respiratory - upper
10 Respiratory - lower

11 Circulatory - heart
12 Circulatory - other
13 Blood/Lymphatics

14 Liver/Gallbladder
15 Gastrointestinal - other

16 Arthritis/Rheumatism
17 Muscular - other
18 Skeletal - other

19 Endocrine
20 Neurological
21 Emotional

22 Renal
23 Urinary - other
24 Genital - male
25 Gynecological

26 Obstetrical - antepartum
27 Obstetrical - intrapartum
28 Obstetrical - postpartum

29 Multi-system*

*Use only if one of the above is not more descriptive and correct

## ETIOLOGY (DX)

1. None

2. Health assessment
3. Developmental
4. Pre/Post surgical

5. Iatrogenic
6. Idiopathic (based on workup)

7. Infection/Post-infection
8. Inflammation
9. Hemorrhaging/Bleeding
10. Occlusion
11. Ulceration

12. Immunologic
13. Allergic
14. Metabolic
15. Deficiencies
16. Nutrition, incl. weight

17. Congenital
18. Degeneration, incl. aging
19. Hypertension

20. Neoplasm - benign
21. Neoplasm - malignant
22. Neoplasm - undetermined

INTOXICATION/ADDICTION
23. Alcohol
24. Drug
25. Poison
26. Tobacco

TRAUMA
27. Burn
28. Concussion
29. Contusion
30. Dislocation/Fracture
31. Foreign body
32. Laceration
33. Sprain

PSYCHO/SOCIAL
34. General adjustment
35. Depression/Anxiety
36. Neuroses
37. Psychoses
38. Psychosomatic

UNDETERMINED
39. Cough
40. Fatigue
41. Fever
42. Headache
43. Malingering
44. Pain

## DIAGNOSTIC PROCEDURES

1. None

2. Routine lab: CBC, urinalysis
3. Serology/VD
4. Blood chemistry
5. "Panel" - automated (e.g., SMA-12)

6. ECG
7. Culture
8. Enzymes

9. Biopsy
10. Bone marrow
11. Endoscopy

RADIOLOGY
12. Chest
13. GI
14. Fluoroscopy
15. Isotopes
16. Radiology - other

OTHER
17. Catheterization
18. EEG
19. Thermography

20. Glucose tolerance
21. Lipid screen
22. Liver function
23. Lumbar puncture
24. Pulmonary function
25. Renal function
26. Thyroid function

27. Breast exam
28. Pap smear
29. Skin test - allergy
30. Skin test - TB/Mycosis

31. Audiometry
32. Tonometry
33. Developmental screen

34. Tests - other

## THERAPEUTIC PROCEDURES

1. None

2. Immunizations
3. Injections - other

DISLOCATIONS/FRACTURES
4. Reduction - open
5. Reduction - closed

SURGICAL
6. Minor tissue removal
7. Incision/Drainage
8. Suturing only
9. Debridement
10. Organ removal/Repair
11. Foreign body removal
12. Dilation/Curettage

13. Arthrocentesis
14. Paracentesis

15. Catheterization
16. Cauterization/Cryotherapy
17. Surgery - other

POST-SURGERY/INJURY
18. Cast/Splint: Apply/Remove
19. Dressing: Apply/Remove
20. Suture removal

OTHER RX
21. Anesthetization
22. Chemotherapy
23. Contraceptives, incl. IUD
24. Physical rehabilitation
25. Radiation therapy
26. Transfusion

27. Rx - other

COUNSELING
28. Growth/Development
29. Family/Social/Sexual
30. Patient education
31. Therapeutic listening/ Reassurance
32. Treatment program

PRESCRIPTIONS/ORDERS
33. Drugs - systemic
34. Drugs - topical
35. Exercise/Diet
36. Prosthesis/Aids

## ENCOUNTER CLASSIFICATION

COMPLEXITY OF SERVICE
1. Minimal
2. Brief
3. Limited
4. Extended
5. Comprehensive

SEVERITY OF PROBLEM
1. None
2. Minor - acute
3. Minor - chronic
4. Moderate - acute
5. Moderate - chronic
6. Severe - acute
7. Severe - chronic

URGENCY OF PROBLEM
1. None
2. Could have been deferred
3. Needed to see today
4. Should have seen sooner
5. Emergency

## STATUS/DISPOSITION

YOUR NEXT CONTACT
1. None this problem
2. Telephone

OUTPATIENT
3. Return as necessary
4. Visit scheduled
5. House call

INPATIENT
6. At hospital admission
7. On rounds (prior admission)
8. In surgery
9. ICU/Recovery room

OTHER
10. Emergency room
11. Extended care facility (Nursing home)
12. DOA/Death
13. Other

REFERRAL/CONSULTATION
1. None
2. Return to referral source
3. Medical specialist for care
4. Medical specialist for consult
5. Surgical specialist for care
6. Surgical specialist for consult
7. Dentist
8. Physician extender (e.g., Medex, Nurse Practitioner, Physician's Assistant)
9. Therapist/Technician (e.g., dietary)
10. Public agency/Social Worker
11. Other

(dat eceived
fro... JGME/HRA)

## Modeling Panel Estimates of Visit Requirements for General Adult Medical Care: Delegated Visits (NPPVSTS) and Visits to Adult General Care Physician (GFIMVSTS)

| CODE | NPPVSTS | GFIMVSTS |
|---|---|---|
| b09 | 738941 | 1724242 |
| R01 | 1244564 | 4978262 |
| 011 | 354816 | 532215 |
| 019 | 3493 | 31441 |
| R02 | 0 | 20443 |
| 034 | 2592845 | 2592845 |
| R03 | 0 | 894121 |
| R04 | 0 | 52401 |
| 053 | 694447 | 1420422 |
| 054 | 917048 | 917048 |
| R05 | 308029 | 308029 |
| [illegible] | 0 | 0 |
| 070 | 106989 | 962700 |
| R07 | 10199417 | 8492161 |
| R08 | 0 | 81413 |
| C01 | 70743 | 70743 |
| 090 | 1209994 | 1209994 |
| R09 | 791506 | 791506 |
| R10 | 10881 | 31482 |
| 110 | 1000753 | 1002253 |
| 118 | 1832291 | 1832291 |
| A11 | 32240 | 182492 |
| R12 | 44671 | 44671 |
| [illegible] | 0 | 122018 |
| [illegible] | 4114427 | 4114427 |
| [illegible] | 2705 | 1387700 |
| [illegible] | 1538113 | 1538113 |
| R16 | 47288 | 898419 |
| R14 | 78277 | 1497285 |
| 174 | 1845888 | 8933172 |
| R17 | 0 | 1241104 |
| C02 | 24544 | 444211 |
| C03 | 0 | 228392 |
| R18 | 0 | 201859 |
| 193 | 1324 | 64995 |
| R19 | 9703 | 184356 |
| 200 | 8104 | 72951 |
| 201 | 0 | 46670 |
| 202 | 3439 | 30949 |
| 203 | 4421 | 39792 |
| 204 | 11054 | 99482 |
| R20 | 10917 | 98255 |
| C04 | 64821 | 1231601 |
| R21 | 49128 | 933423 |
| R22 | 267108 | 1068434 |
| 240 | 257920 | 1461545 |
| 241 | 122819 | 2333560 |
| 242 | 103168 | 1960188 |
| 244 | 2765702 | 4148552 |
| 245 | 17286 | 328426 |
| 246 | 12282 | 233355 |
| 250 | 7605680 | 22817039 |
| 251 | 81324 | 731015 |
| 252 | 0 | 69141 |
| 253 | 0 | 65502 |
| 255 | 0 | 58951 |
| 256 | 122273 | 1100457 |
| 257 | 0 | 26200 |
| 258 | 0 | 207424 |
| R24 | 328427 | 328427 |
| R25 | 43308 | 389742 |
| 274 | 1522518 | 4090073 |
| 277 | 1296423 | 1296423 |
| R26 | 0 | 4093964 |
| 280 | 466712 | 1866847 |
| 281 | 65503 | 589531 |
| C08 | 0 | 4483711 |
| R27 | 0 | 1449241 |
| C06 | 152841 | 2703987 |
| 300 | 2593937 | 23345433 |
| 302 | 4788644 | 20245133 |
| 305 | 2161411 | 19454520 |
| 306 | 3734411 | 14978488 |
| R28 | 228178 | 9124818 |
| R29 | 0 | 0 |
| R30 | 0 | 147382 |
| R31 | 7123 | 135348 |
| C07 | 26411 | 505464 |
| C08 | 138540 | 1244887 |
| 340 | 240179 | 2141112 |
| 341 | 427811 | 3850278 |
| R32 | 54333 | 564498 |
| 353 | 31184 | 280487 |
| R33 | 1321129 | 11908158 |
| 360 | 81857 | 444718 |
| R34 | 240430 | 2216741 |
| 370 | 90667 | 90667 |
| 371 | 270269 | 2421818 |
| R35 | 229843 | 2063389 |
| 380 | 466712 | 1400134 |
| 381 | 818793 | 2454380 |
| C09 | 105010 | 1995194 |
| 385 | 18448 | 35476 |
| R36 | 844987 | 2179984 |
| 390 | 0 | 248907 |
| 394 | 0 | 818793 |
| 395 | 0 | 455034 |
| R38 | 372059 | 3348535 |
| 401 | 13510089 | 40530264 |
| 402 | 0 | 11062806 |
| R39 | 0 | 1375544 |
| 410 | 0 | 3733490 |
| 411 | 0 | 3244979 |
| 412 | 0 | 10163952 |
| 413 | 926509 | 3764038 |
| 424 | 0 | 1532779 |
| 425 | 0 | 1021853 |
| 427 | 0 | 13100492 |
| R40 | 0 | 8351491 |
| 435 | 207428 | 1866848 |
| 436 | 0 | 8185 |
| 437 | 491 | 9331 |
| R41 | 401534 | 7429188 |
| 440 | 0 | 3023255 |
| 444 | 0 | 255463 |
| 446 | 0 | 39301 |
| R42 | 43232 | 821410 |
| 450 | 0 | 727083 |
| 451 | 390073 | 3510656 |
| 454 | 259295 | 777886 |
| 455 | 709817 | 2839269 |
| R43 | 384227 | 3458041 |
| 460 | 13490223 | 15211134 |
| 461 | 1134847 | 4539390 |
| 462 | 2702018 | 2702018 |
| 463 | 2837119 | 2837119 |
| 464 | 472853 | 472853 |
| 465 | 1445428 | 3888992 |
| 466 | 1859284 | 5577852 |
| 470 | 823155 | 1719444 |
| 844 | 384227 | 3458041 |
| R45 | 564203 | 5077824 |
| 470 | 4914 | 42227 |
| 471 | 2424811 | 14888264 |
| 472 | 666534 | 5998804 |
| 473 | 1851291 | 14441823 |
| 500 | 518348 | 2841393 |
| 502 | 7444 | 66974 |
| 503 | 246436 | 2216741 |
| 504 | 288477 | 1731113 |
| 507 | 579399 | 3283258 |
| 510 | 384227 | 3458041 |
| 511 | 287889 | 2591608 |
| 512 | 0 | 2454379 |
| 515 | 49142 | 422282 |
| 517 | 268507 | 2389348 |
| 518 | 129349 | 517474 |
| R47 | 0 | 5442029 |
| R48 | 805492 | 1879949 |
| 530 | 35124 | 447398 |
| 531 | 1255628 | 11300655 |
| 532 | 368784 | 3319060 |
| 533 | 71354 | 1355718 |
| 535 | 344139 | 3097248 |
| 534 | 1057103 | 9513927 |
| R49 | 256443 | 4876602 |
| R50 | 0 | 519932 |
| 550 | 52403 | 122273 |
| 551 | 843029 | 4777147 |
| R51 | 0 | 10234 |
| 562 | 612603 | 2450410 |
| 563 | 311551 | 5919461 |
| 564 | 2245161 | 4795484 |
| 565 | 10371 | 93340 |
| R52 | 168999 | 3210978 |

| CODE | NFFVBTS | OFINVBTS |
|---|---|---|
| S71 | 136556 | 1229007 |
| C10 | 22207 | 421927 |
| S77 | 29886 | 567831 |
| R53 | 0 | 1179041 |
| R54 | 44078 | 837484 |
| S90 | 588035 | 11167867 |
| S92 | 0 | 2431484 |
| S95 | 390794 | 3517142 |
| S97 | 26611 | 26611 |
| S98 | 0 | 229258 |
| R85 | 780144 | 7021315 |
| C11 | 249913 | 2249218 |
| R34 | 38033 | 342294 |
| C12 | 368484 | 3318156 |
| A16 | 11493 | 103374 |
| RB7 | 0 | 1427899 |
| C13 | 57054 | 513502 |
| A22 | 45040 | 405537 |
| C14 | 97473 | 877888 |
| C24 | 436498 | 1309464 |
| A37 | 181393 | 758578 |
| A28 | 2052 | 18468 |
| A29 | 59542 | 535882 |
| A30 | 1144501 | 1144501 |
| A39 | 144183 | 1297647 |
| R40 | 19284 | 346464 |
| R41 | 112052 | 1017172 |
| A50 | 0 | 11014318 |
| R43 | 41753 | 375777 |
| C15 | 224094 | 2017843 |
| R44 | 564272 | 5237684 |
| A91 | 3057 | 98078 |
| S92 | 2532800 | 16131202 |
| 494 | 787802 | 3031207 |
| 498 | 570554 | 2314222 |
| R45 | 242490 | 728870 |
| 704 | 84997 | 240990 |
| 706 | 7221754 | 7221754 |
| 708 | 15721 | 141484 |
| R46 | 792954 | 3171822 |
| 712 | 804120 | 3214481 |
| 713 | 1502322 | 1502322 |
| 714 | 255070 | 1020281 |
| 715 | 117508 | 1057549 |
| 716 | 0 | 49124 |
| 717 | 5558715 | 50028431 |
| R47 | 7162607 | 64463462 |
| 720 | 31223 | 593242 |
| C16 | 830060 | 7470537 |
| 725 | 390401 | 7417610 |
| 728 | 207559 | 3943613 |
| R48 | 191794 | 447518 |
| 731 | 2206648 | 12504337 |
| 734 | 18341 | 348477 |
| R49 | 185099 | 1673089 |

| CODE | NFFVBTS | OFINVBTS |
|---|---|---|
| 744 | 0 | 1421208 |
| R70 | 0 | 393292 |
| 780 | 0 | 3235869 |
| 781 | 0 | 231627 |
| 782 | 151074 | 2870451 |
| 783 | 168016 | 3192310 |
| 784 | 5583 | 106081 |
| 785 | 220686 | 4193028 |
| 787 | 197346 | 3749565 |
| 788 | 178111 | 3384112 |
| C17 | 3341 | 63472 |
| 790 | 453349 | 4080144 |
| 791 | 1037138 | 4148552 |
| 793 | 25745 | 231881 |
| R71 | 902154 | 3608618 |
| C18 | 134719 | 2559454 |
| C19 | 112448 | 2136503 |
| C20 | 80497 | 1533234 |
| C21 | 0 | 1395512 |
| C22 | 2051500 | 18463501 |
| C23 | 0 | 2710384 |
| R72 | 0 | 393019 |
| C24 | 81213 | 3979418 |
| C25 | 166248 | 8146140 |
| R73 | 5332 | 172399 |
| C26 | 833204 | 7498835 |
| R74 | 0 | 3820 |
| R75 | 9707 | 184437 |
| C27 | 653672 | 2614688 |
| C28 | 1427402 | 8088612 |
| C29 | 100351 | 1906674 |
| C30 | 392428 | 3533448 |
| R76 | 0 | 7278 |
| C31 | 233029 | 4427542 |
| C32 | 420532 | 3784789 |
| C33 | 330688 | 4283045 |
| Y00 | 5369085 | 30424813 |
| N20 | 2442787 | 2442786 |

SUMMARY 1990 OUTPUT BASED ON ADULT MEDICAL CARE AMBULATORY DATA, AND MODELING PANEL ADJUSTMENTS FOR REQUIREMENTS OF GENERAL/FAMILY PRACTITIONERS AND GENERAL INTERNISTS

| | | | Before Delineation | After Delineation | % Non-Delineation |
|---|---|---|---|---|---|
| 1. Adult Morbidity Visits [1] | AMC [2] | | 1,681,893,984 | 1,361,718,048 | (80) |
| | Modeling [3] | | 1,099,386,948 | | |
| 2. Adult Well-Care | AMC | | 99,555,996 | 52,444,675 | (53) |
| | Modeling | | 35,793,898 | | |
| 3. Adult Family Planning | AMC | | 11,288,286 | 5,604,643 | (50) |
| | Modeling | | 4,883,573 | | |
| 4. Total Adult Visits | AMC | | 1,792,639,266 | 1,399,767,366 | (78) |
| | Modeling | | 1,108,284,419 | 971,766,419 [4] | (88) |
| 5. Productivity: Nonhospital Visits per Year: (FP) | AMC | 150 visits/week x 46 weeks | | = 6,900 | |
| | Modeling | (150 x 46) | | = 5,520 | |
| 6. Productivity: Nonhospital Visits per Year: (IM) | AMC | 80 visits/week x 45 | | = 3,600 | |
| | Modeling | (80 x 46) | | = 3,680 | |
| 7. Requirements before interspecialty impacts | | | | | |
| FP Supply Recommendations, all ages/visits | | | | 88,250 | |
| FP Supply: Adult Medical Care [5] [6] | | | | 42,973 | |
| FP Adult Visits (after delegation) [7] | | | | 321,431,344 | |
| IM Visits (after delegation) | | | | 438,335,075 | |
| ÷ Simultaneity (1.7) [8] | | | | 264,902,985 | |
| ÷ Productivity (3,680) | | | | 71,985 | |
| x 1.031 ( 17 years old+m) [9] | | | | 74,216 | |
| x 1.124 (non-patient care add-on) [9] | | | | 83,419 | |
| - 13,183 FTE General Internists [10] | | | | 70,236 | |
| 8. 1990 Estimates | | | | | |
| a. Physician Supply Based on Current Practice | | | | | |
| Family Practice (GSF 77) [11] | | | | 83,925 | |
| General Internists | | | | 73,662 | |
| b. Resulting Percent Oversupply (+) or Undersupply (-) | | | | | |
| Family Practice (GSF 77) [11] | | | | +9.1% | |
| General Internists | | | | +9.1% | |

Footnotes to Table III-A.3

[1] Includes T-4 and T-13 Special Examinations.

[2] AMC = Final Adult Medical Care Delphi Conference, consensus of all adjustments.

[3] Modeling = Adjustments recommended by Modeling Panel, and accepted by GMENAC.

[4] Delegation of 128,368,000 visits recommended by Modeling Panel based on potential 1990 output of nonphysician providers (including overlap).

[5] Previous estimate adjusted downward to account for a percent of nurse-practitioner five recommendations to equal the remaining supply-requirements surplus for general internal medicine.

[6] Adjusted to account for 13 percent of family practice in 1990 for patients younger than 17 years of age. Also adjusted to account for 11.8 percent of total FPs required supply in 1990: based on 6 percent remaining, 2 percent retirements, 1.8 percent entries/reentries.

[7] Based on a productivity of 3,320 visits per year and a reduction by a simultaneity factor of 1.3.

[8] Adjusted to account for 3 percent of general internal medicine practice in 1990 for patients younger than 17 years of age (equivalent to 3.1 percent increase over the 17 or older requirements.

[9] Adjusted to account for 11.8 percent of total. The resultant supply in 1990: based on 3.3 percent remaining, 4.3 percent retirements, 3 percent entries/reentries (equivalent to 12.4 percent increase over presently practicing male physicians).

[10] Previous estimate reduced by 13,183 full-time equivalents to account for the manpower impact of the internal medicine subspecialties (4,416), general pediatrics (3,790), and the emergency medicine physicians (4,577), in adult general care.

[11] Includes osteopathic general practice.



Taken from Table III.A.3 (p. 33, 34) GMENAC Report, Volume II, Modeling, Research, and Data Technical Panel

APPENDIX B-3

GMENAC DATA FOR FAMILY PRACTICE

NONPHYSICIAN PROVIDERS AVAILABLE
FOR ADULT MEDICAL CARE
IN 1990

| | Estimated Active Supply in 1990 | Capability in Visits (millions) 5/ |
|---|---|---|
| Adult NPs | 5,800 1/ | 29.0 |
| Family NPs | 7,200 2/ | 36.0 |
| Internal Medicine PAs | 3,100 3/ | 15.5 |
| GP/FP PAs | 9,600 4/ | 48.0 |
| TOTAL | 25,700 | 128.5 |

Notes

1/ Assumes a total supply of 39,000 with 20 percent trained as adult NPs and 75 percent active.

2/ Assumes 30 percent of the supply will be trained as family NPs and 75 percent will be active. A family NP is equivalent to .82 adult NPs.

3/ Assumes a supply of 26,000 with 80 percent active and 15 percent working in internal medicine.

4/ Assumes that 56 percent of the active supply will be in general and family practice. Each PA in general family or family practice is counted as .82 adult PAs.

5/ Assumes a nonphysician provider working in adult medical care will provide 5,000 ambulatory visits per year. This is slightly more than 50 percent of the productivity of a physician providing adult ambulatory care full time in 1990, as estimated by the Delphi and Modeling Panels.

Taken from Table 10 (p. 39) GMENAC Report, Volume VI, Nonphysician Health Care Provider Technical Panel

# APPENDIX C

## SUPPLEMENTARY MATERIALS FOR PSYCHIATRY

APPENDIX C-1

ACGME FORM

# LIAISON COMMITTEE
# ON GRADUATE MEDICAL EDUCATION
# 535 North Dearborn Street, Chicago, Illinois 60610

## RESIDENCY TRAINING PROGRAM IN PSYCHIATRY

Date of Survey _____ Name of Program: _____

_____

Program Director: Name _____ Title _____

Mailing address _____
City State Zip

Telephone number (_____) _____

| Current status (check one) | Length of program* | Approval requested (check one) | Length of program* |
|---|---|---|---|
| Application | _____ yrs. | Provisional (New Program) | _____ yrs. |
| Reapplication | _____ yrs. | Continued approval | _____ yrs. |
| Provisional Approval | _____ yrs. | Full approval | _____ yrs. |
| Probationary Approval | _____ yrs. | | |
| Full approval | _____ yrs. | | |

Please fill out completely, identifying all institutions involved in the training program (see separate instructions). Please use typewriter.

1. PARENT INSTITUTION: # 1 JCAH Accreditation:** Yes _____ No _____
Name Address:

Length of assignment in months: 1st year _____ 2nd year _____ 3rd year _____ 4th year _____

2. INSTITUTION # 2 JCAH Accreditation:** Yes _____ No _____
Name Address:

Integrated or Affiliated*** Distance between 2 & 1 _____ miles
Length of assignment in months: 1st year _____ 2nd year _____ 3rd year _____ 4th year _____

3. INSTITUTION # 3 JCAH Accreditation:** Yes _____ No _____
Name Address:

Integrated or Affiliated*** Distance between 3 & 1 _____ miles
Length of assignment in months: 1st year _____ 2nd year _____ 3rd year _____ 4th year _____

4. INSTITUTION # 4 JCAH Accreditation:** Yes _____ No _____
Name Address:

Integrated or Affiliated*** Distance between 4 & 1 _____ miles
Length of assignment in months: 1st year _____ 2nd year _____ 3rd year _____ 4th year _____

* *Programs are approved for two, three or four years of training.*

** *If not accredited by the Joint Commission on Accreditation of Hospitals, attach explanation.*

*** *For definition "integrated" and "affiliated" see "Directory of Residency Training Programs"; if affiliated, attach a confirming letter from Departmental Chairman of that institution.*

## I. RESIDENCY PROGRAM TEACHING STAFF

A. MEDICAL TEACHING STAFF: List only psychiatric or neurologic staff physicians, including volunteer instructors and consultants responsible for training of residents:

| Name and Title | Primarily at Institution #1, 2, 3, or 4 | Full time | Part time | Time Spent in Teaching of residents | | Cert. by ABP&N* |
|---|---|---|---|---|---|---|
| | | | | Mos. per year | Hrs. per week | |
| | | | | | | |
| | | | | | | |
| | | | | |

## I. RESIDENCY PROGRAM TEACHING STAFF (continued)

B. OTHER PROFESSIONAL STAFF: List behavioral scientists, psychologists, anthropologists, sociologists, psychiatric nurses, social workers, physiologist, research personnel:*

| Name, Title and Degree | Primarily at Institution #1, 2, 3, 4 | Time Devoted to Teaching: Mos. per year | Time Devoted to Teaching: Hrs. per week | *Scientific or Professional Discipline |
|---|---|---|---|---|
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## II. TRAINEES IN PROGRAM

List all trainees currently in program, by level of training. Do not include trainees on rotation from other approved programs. Indicate (with asterisk) ECFMG certification, with number; or unlimited state licensure, with number and expiration date. (attach added sheet, properly identified, if necessary)

| Level of Training | Name and Degree | Medical School | Year Grad. | Date training Began | Date training Ends |
|---|---|---|---|---|---|
| A. 1st year resident | | | | | |
| | | | | | |
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| B. 2nd year resident | | | | | |
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| C. 3rd year resident | | | | | |
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| D. 4th year resident | | | | | |
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| | | | | | |
| E. 5th year (Describe in attachment)* | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |

*Include in this category individuals in special programs, such as clinical or research fellows, Chief Residents, etc.

## III. FACILITIES USED IN TRAINING PROGRAM

| | Inst. #1 | Inst. #2 | Inst. #3 | Inst. #4 |
|---|---|---|---|---|
| A. Bed Capacity: *General Hospitals: Total Psychiatric Beds* | | | | |
| *Special Psychiatric Units:* 1. Child | | | | |
| 2. Adolescent | | | | |
| 3. Geriatric | | | | |
| 4. Other | | | | |
| *Psychiatric Beds on Other Services* | | | | |
| *Psychiatric Hospital* | | | | |
| B. *Average Daily Census:* 1. *Inpatients* a. General Hosp. | | | | |
| b. Psych. Hosp. | | | | |
| 2. *Outpatients* a. General Hosp. | | | | |
| b. Psych. Hosp. | | | | |
| c. Clinics | | | | |
| C. *Annual New Admissions:* 1. General Hospital | | | | |
| 2. Psychiatric Hospital | | | | |
| D. *Annual Readmissions* 1. General Hospital | | | | |
| 2. Psychiatric Hosp. | | | | |
| E. *Mean duration of stay in Hospital* 1. General Hospital | | | | |
| 2. Psychiatric Hosp. | | | | |
| 3. Clinics (mean duration of treatment) | | | | |

## IV. TYPES OF PATIENTS INCLUDED IN TEACHING PROGRAM

Variety of in-patients utilized for teaching purposes during period of training for which residents have responsibility:

| | Estimated Number | | | | | |
|---|---|---|---|---|---|---|
| | ADULT | | CHILD | | ADOLESCENT (ages 12-18) | |
| | Male | Female | Male | Female | Male | Female |
| A. *Psychiatric Patients:* Psychoses | | | | | | |
| Neuroses | | | | | | |
| Character disorders | | | | | | |
| Psycho-physiologic disorders | | | | | | |
| Mental retardation | | | | | | |
| Alcoholism | | | | | | |
| Drug Addiction | | | | | | |
| Neurological syndromes | | | | | | |
| Geriatric (over age 65) | | | | | | |
| B. *Psychiatric consults to other services (med. & surg.)* | | | | | | |
| C. *Neurological Patients:* | | | | | | |
| D. *Med. & Surg. Patients:* | | | | | | |

## V. CLINICAL LEARNING EXPERIENCE

The Narrative Description requested on page 9 of this form should cover the following:

A. Supervision:

Include hours per resident, location of supervision, and description of evaluation of performance of residents and supervisors.

B. In-Patient:

Include a statement about opportunity for follow-up of patients and how it is carried out.

C. Out-Patient:

1. Participation in Adult and Family Clinics.
2. Participation in Child and Adolescent Clinics.

D. Consultation:

1. Social and community psychiatry, including consultation to other agencies.
2. Liaison with medicine and pediatric services.
3. Liaison with other medical/surgical services.
4. Forensic psychiatry.

E. Neurology:

Describe experience.

F. Research:

Describe research programs including facilities, supervisors, and required or elective opportunities for the residents. If elective, how many residents are involved?

| G. Case Load: | In-Patient | Out-Patient |
|---|---|---|
| 1. Average case load per resident during: | 1st yr. _____ | 1st yr. _____ |
| | 2nd yr. _____ | 2nd yr. _____ |
| | 3rd yr. _____ | 3rd yr. _____ |
| 2. Total patients treated per resident: | 1st yr. _____ | 1st yr. _____ |
| | 2nd yr. _____ | 2nd yr. _____ |
| | 3rd yr. _____ | 3rd yr. _____ |

## VI. EDUCATIONAL PROGRAM

A. In narrative description (see page 9 of form) submit the rotational plan in use, describing the curriculum and content of each year of instruction.

B. Describe training offered to residents on rotation from other psychiatric training programs:

C. Describe training of residents on rotation from other training program (non-psychiatric):

D. Describe training of residents on rotation from psychiatry in liaison with other services:

E. Describe the experiences provided for the PG-1 resident (formerly the internship):

F. To what extent do residents engage in teaching? Specify:

G. In narrative, please also describe special programming for graduates of foreign medical schools:

## VII. SPECIAL FACILITIES

A. *Lab services available:*

Clinical Pathology_____Neuropathology _____

Anatomic Pathology_____EEG_____EMG _____

Psychological Lab_____

B. *Neuropathology:*

Name of Neuropathologist:_____Full time_____ Part time _____

C. *Electroencephalography:*

Name of electroencephalographer_____Full time_____ Part time _____
Relationship of EEG Lab to Department of Psychiatry:

_____

_____

_____

Who interprets EEG's? _____

D. *Neurology:*

Name of Director, Neurology Training Program with which the psychiatry residency is affiliated:_____

Described facility where psychiatry residents obtain teaching and experience in neurology:

E. *Bio-Medical Library (Primary facility of training program)*

Location_____

Total number of books_____

Number of journals regularly received (psychiatry, behaviorial sciences and related titles):_____

Number of medical journals regularly received_____

Number of neurologic journals regularly received_____

DO NOT FURNISH LISTS OF TITLES, SUPPLY NUMERICAL INFORMATION REQUESTED ONLY

Availability of: MEDLINE: yes_____ no_____; MEDLAR: yes_____ no_____;

INDEX MEDICUS: yes_____ no_____

Name of Librarian _____Degree_____

## VIII. NARRATIVE DESCRIPTION

Attach a narrative description of each year of the training program. This narrative should include the items requested in Sections V and VI of this form, and should be written to describe the program as currently designed and carried out. Please refer to the "Special Requirements for Residency Training in Psychiatry" for direction on the additional items that should be covered by this narrative, which must be prepared for presentation with this form. BOOKLETS OR OTHER PUBLICATIONS WILL NOT BE ACCEPTED AS FULFILLING THIS REQUEST.

IF MORE SPACE IS REQUIRED, ATTACH EXTRA SHEETS INDICATING BY APPROPRIATE REFERENCE THE SECTION AND PAGE NUMBER OF THE FORM TO WHICH YOU REFER.

INFORMATION FURNISHED BY:

Name _____ Title _____

Signature _____ Date _____

If information is furnished by someone other than the Program Director, the latter must verify the accuracy of the information submitted:

VERIFIED BY PROGRAM DIRECTOR:

Name _____ Date _____

Signature _____

If program director is not the Chairman of the Department of Psychiatry or Institutional Director, the Chairman or Institutional Director must verify the accuracy of the information submitted:

VERIFIED BY CHAIRMAN OF DEPARTMENT OF PSYCHIATRY OR INSTITUTIONAL DIRECTOR:

Name _____ Title _____

Signature _____ Date _____

APPENDIX C-2

SAMPLE PAGES FROM THE USC
PRACTICE PROFILE LOG DIARY:

a) Week's Practice Summary

b) Activity Overview

c) Patient Encounter Section

d) Questionnaire: Training and
Ancillary Personnel

| DAY OF THE WEEK | TELEPHONE: WITH HEALTH PROFESSIONAL | TYPES OF PATIENT ENCOUNTERS | | | | TOTAL PROFESSIONAL HOURS (Excluding On Call) |
|---|---|---|---|---|---|---|
| | | TELEPHONE: WITH PATIENT | PATIENTS SEEN BY YOU: OUTPATIENT | PATIENTS SEEN BY YOU: INPATIENT | PATIENTS SEEN BY OTHER STAFF ONLY | |
| SUNDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |
| MONDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |
| TUESDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |
| WEDNESDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |
| THURSDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |
| FRIDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |
| SATURDAY | ☐ | ☐ | ☐ | ☐ | ☐ | |

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PART I: WEEK'S PRACTICE SUMMARY

/ /
Mo. Day Yr.
Date

**INSTRUCTIONS** For each time interval, select the ONE Activity Code on the right that best describes your activities during that period. Use arrows to indicate activities continued through more than one interval. Insert today's date in the space provided.

| BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE |
|---|---|---|---|---|---|---|---|
| Midnight | | AM 6:00 | | Noon | | PM 6:00 | |
| AM 12:15 | | AM 6:15 | | PM 12:15 | | PM 6:15 | |
| AM 12:30 | | AM 6:30 | | PM 12:30 | | PM 6:30 | |
| AM 12:45 | | AM 6:45 | | PM 12:45 | | PM 6:45 | |
| AM 1:00 | | AM 7:00 | | PM 1:00 | | PM 7:00 | |
| AM 1:15 | | AM 7:15 | | PM 1:15 | | PM 7:15 | |
| AM 1:30 | | AM 7:30 | | PM 1:30 | | PM 7:30 | |
| AM 1:45 | | AM 7:45 | | PM 1:45 | | PM 7:45 | |
| AM 2:00 | | AM 8:00 | | PM 2:00 | | PM 8:00 | |
| AM 2:15 | | AM 8:15 | | PM 2:15 | | PM 8:15 | |
| AM 2:30 | | AM 8:30 | | PM 2:30 | | PM 8:30 | |
| AM 2:45 | | AM 8:45 | | PM 2:45 | | PM 8:45 | |
| AM 3:00 | | AM 9:00 | | PM 3:00 | | PM 9:00 | |
| AM 3:15 | | AM 9:15 | | PM 3:15 | | PM 9:15 | |
| AM 3:30 | | AM 9:30 | | PM 3:30 | | PM 9:30 | |
| AM 3:45 | | AM 9:45 | | PM 3:45 | | PM 9:45 | |
| AM 4:00 | | AM 10:00 | | PM 4:00 | | PM 10:00 | |
| AM 4:15 | | AM 10:15 | | PM 4:15 | | PM 10:15 | |
| AM 4:30 | | AM 10:30 | | PM 4:30 | | PM 10:30 | |
| AM 4:45 | | AM 10:45 | | PM 4:45 | | PM 10:45 | |
| AM 5:00 | | AM 11:00 | | PM 5:00 | | PM 11:00 | |
| AM 5:15 | | AM 11:15 | | PM 5:15 | | PM 11:15 | |
| AM 5:30 | | AM 11:30 | | PM 5:30 | | PM 11:30 | |
| AM 5:45 | | AM 11:45 | | PM 5:45 | | PM 11:45 | |

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## ACTIVITY CODES:

PATIENT CARE
1. Office exams and therapy
2. Telephone calls
3. Home, industry or school visits
4. OPD, clinic or CMHC
5. Emergency room
6. Hospital - on wards or floors (incl. daily rounds)
7. Hospital - special techniques (e.g., narcoanalysis, convulsive therapy)
8. Extended care facility (e.g., Halfway house, Nursing home)
9. Detention facility
10. Teaching rounds

OTHER PROFESSIONAL
11. Consultations
12. Supervision of personnel
13. Laboratory and other indirect care
14. Patient education
15. Teaching - other
16. Teaching related: Meetings, specific document research, materials
17. Research
18. Research related: Meetings, fiscal, personnel, specific document analysis
19. Continuing education: National/regional meetings, courses, self-instruction, professional journals, psychoanalytic institutes
20. Personal psychoanalysis or psychotherapy
21. Health-related committee activities

ADMINISTRATION
22. Patient related: Charts, billing, insurance forms, lab reports, pharmacy, medical/legal
23. Other: Dictating, salesmen, purchasing, personnel and management

PROFESSIONAL TRAVEL
24. Travel: Enroute to hospital, office, meetings, etc.

OTHER
25. On call (use only if you are on call and one of the other codes in this list is not applicable)
26. Completion of this survey instrument
27. Civic activities, service clubs
28. Personal - not on call

**PLEASE REVIEW INSTRUCTIONS BEFORE STARTING**

| ENCOUNTER LOCATION | | | |
|---|---|---|---|
| | 1. Office | 5. Emergency Room | 8. Home |
| | 2. OPD | 6. Extended Care Facility (e.g., Halfway house) | 9. Other |
| | 3. Clinic/CMHC | | |
| | 4. Hospital | 7. Industry/School | |

| PRIMARY PROBLEM TYPE | | |
|---|---|---|
| | 1. Preventive | 5. Medical & Surgical |
| | 2. Medical | 6. Obstetrical |
| | 3. Surgical - minor | 7. Psycho/Social |
| | 4. Surgical - major | 8. Environmental/Economic |

Tear off here

Staff may complete this section

Use numbers from Coding Key

| PATIENT ID | Your Use Only | Line Number | ENCOUNTER DATE and TIME: Date (Mo Day Yr); Time in Minutes | PATIENT & ENCOUNTER CHARACTERISTICS: Location (Use one of the above codes 1-9); Est. male to nearest year (0 = under one year); Age; 1 Male 2 Female; Sex; Seen patient before? 1 Yes 2 No; Regular patient? 1 Yes 2 No; 1 Self/Patient 2 Agency 3 Psychiatrist/Other Physician 4 Other Health Professional 5 Consult; Patient Source; This patient? 1 Yes 2 No 3 Undetermined; Patient's family? 1 Yes 2 No 3 Undetermined; Majority of Care; 1 Provide 2 Assist; Your Role; Number of visits for this problem | PATIENT'S PROBLEM(S): Type (use one of the above codes 1-8); Primary: Focus, Etiology (Dx); Other: Focus, Etiology (Dx), Focus, Etiology (Dx) | DIAGNOSTIC PROCEDURES: Record all procedures you ordered, performed or interpreted during this encounter. If None record "1". Circle those procedures you ordered but did not perform or interpret. | THERAPEUTIC PROCEDURES: Record all procedures you ordered or performed during this encounter. If None record "1". Circle those procedures you ordered but did not perform. | ENCOUNTER CLASS: Complexity of service; Severity of problem; Urgency of problem; Your next contact; Referral/Consultation | STATUS |
|---|---|---|---|---|---|---|---|---|---|
| | | 031 | | Primary Dx (Print) | Other Dx (Print) | | | | |
| | | 032 | | Primary Dx (Print) | Other Dx (Print) | | | | |
| | | 033 | | Primary Dx (Print) | Other Dx (Print) | | | | |
| | | 034 | | Primary Dx (Print) | Other Dx (Print) | | | | |
| | | 035 | | Primary Dx (Print) | Other Dx (Print) | | | | |

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PART II, SECTION C: PATIENT ENCOUNTERS—OUTPATIENT/INPATIENT

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# CODING KEY

## FOCUS

1 Well patient

2 Skin, incl. nails, hair
3 Head/Neck

4 Eyes
5 Ears/Nose/Throat

6 Breasts

7 Respiratory

8 Circulatory
9 Blood/Lymphatics

10 Gastrointestinal

11 Musculoskeletal

12 Endocrine

13 Neurological

14 Genitourinary
15 Obstetrical

MENTAL STATUS
16 Appearance
17 Orientation
18 Feeling/Affect/Mood
19 Activity/Behavior
20 Impulse control
21 Speech
22 Interpersonal relationships
23 Thought content, incl hallucinations, delusions, homicidal and suicidal ideation
24 Thought process, incl association, memory, logic, concentration, attention
25 Intellectual function
26 Insight

27 Multi-system*

*Use only if one of the above is not more descriptive and correct

## ETIOLOGY (DX)

1 None

2 Health assessment
3 Developmental
4 Pre/Post surgical

5 Iatrogenic
6 Idiopathic (based on workup)

7 Infection/Post infection
8 Inflammation
9 Hemorrhaging/Bleeding
10 Occlusion
11 Ulceration

12 Allergic/Immunologic
13 Metabolic/Deficiencies
14 Nutrition, incl. weight

15 Congenital
16 Degeneration, incl. aging
17 Hypertension

18 Neoplasm - benign
19 Neoplasm - malignant
20 Neoplasm - undetermined

21 Poison
22 Tobacco

23 Trauma

PSYCHIATRIC
24 Schizophrenia
25 Affective psychoses
26 Psychoses - other
27 Neuroses
28 Personality/Behavior disorders (non psychotic)
29 Organic brain syndrome with/without psychosis
30 Psychophysiologic
31 Sexual dysfunction
32 Drug dependence/Reaction
33 Alcoholism
34 Transient/Situational
35 Mental retardation

36 Undetermined

## DIAGNOSTIC PROCEDURES

1 None

2 Interview, incl. mental status exam
3 General physical exam
4 Neurological exam

5 Drug levels
6 Psychological tests
7 Sodium amytal interviews
8 Hypnosis

9 EEG
10 Brain scan
11 CAT scan
12 X ray - skull
13 Lumbar puncture
14 Neurological tests - other

15 CBC
16 Urinalysis
17 Serology/VD
18 Blood chemistry
19 "Panel" - automated (e.g., SMA-12)

20 ECG
21 X ray - chest
22 X ray - other

23 Culture
24 Enzymes

25 Biopsy
26 Endoscopy

27 Glucose tolerance
28 Liver function
29 Pulmonary function
30 Renal function
31 Thyroid function
32 Pituitary function
33 Chromosome analysis

34 Pap smear

35 Tests - other

## THERAPEUTIC PROCEDURES

1 None

PSYCHOTHERAPY
2 Insight oriented, (incl. psychoanalysis)
3 Supportive
4 Group/Family/Conjoint
5 Behavioral

CHEMOTHERAPY
6 Antipsychotic
7 Lithium
8 Antidepressant
9 Sedative
10 Hypnotic

OTHER ORGANIC THERAPY
11 Electroconvulsive
12 Insulin shock
13 Shock therapy - other
14 Psychosurgery
15 Biofeedback

OTHER
16 Hospitalization - full
17 Hospitalization - partial
18 Hospitalization - discharge

19 Rehabilitation

20 Rx - other

## ENCOUNTER CLASSIFICATION

COMPLEXITY OF SERVICE
1 Minimal
2 Brief
3 Limited
4 Extended
5 Comprehensive

SEVERITY OF PROBLEM
1 None
2 Minor - acute
3 Minor - chronic
4 Moderate - acute
5 Moderate - chronic
6 Severe - acute
7 Severe - chronic

URGENCY OF PROBLEM
1 None
2 Could have been deferred
3 Needed to see today
4 Should have seen sooner
5 Emergency

## STATUS/DISPOSITION

YOUR NEXT CONTACT
1 None this problem
2 Telephone

OUTPATIENT
3 Return as necessary
4 Visit scheduled - regular
5 Visit scheduled - special
6 House call

INPATIENT
7 At hospital admission
8 On rounds (prior admission)
9 ICU/Recovery room

OTHER
10 Emergency room
11 Extended care facility (e.g., Halfway house, Nursing home)
12 DOA/Death
13 Other

REFERRAL/CONSULTATION
1 None
2 Return to referral source

REFERRAL (FOR CARE)
3 Psychiatrist
4 Neurologist
5 Medical specialist
6 Surgical specialist

CONSULT (FOR ADVICE)
7 Psychiatrist
8 Neurologist
9 Medical specialist
10 Surgical specialist

OTHER
11 Psychologist
12 Social Worker
13 Psychiatric Nurse
14 Physician Extender (e.g., Medex, Nurse Practitioner, Physician's Assistant)
15 Therapist/Technician (e.g., Vocational, O.T.)
16 Public Agency
17 Other

## A. YOUR MEDICAL EDUCATION AND CURRENT SPECIALTIES

AM Aerospace Medicine
A Allergy
AN Anesthesiology
BE Broncho-Esophagology
CD Cardiovascular Diseases
CIM Clinical Immunology
CPH Clinical Pharmacology
D Dermatology
DIA Diabetes
EM Emergency Medicine
END Endocrinology
EPI Epidemiology
FP Family Practice
GE Gastroenterology
GP General Practice
GPM General Preventive Medicine
GER Geriatrics
GEN Genetics
GYN Gynecology
HEM Hematology
HYP Hypnosis
ID Infectious Diseases
IM Internal Medicine
LAR Laryngology
ND Neoplastic Diseases
NEP Nephrology
N Neurology
CHN Neurology, Child
NM Nuclear Medicine
NTR Nutrition
OBS Obstetrics
OBG Obstetrics and Gynecology
OM Occupational Medicine
ONC Oncology
OPH Ophthalmology
OST Osteopathy
OT Otology
OTO Otorhinolaryngology
CLP Pathology, Clinical
FOP Pathology, Forensic
PD Pediatrics
PDA Pediatric Allergy
PDC Pediatric Cardiology
PM Physical Medicine and Rehabilitation
P Psychiatry
CHP Psychiatry, Child
PYA Psychoanalysis
PYM Psychosomatic Medicine
PH Public Health
PUD Pulmonary Disease
R Radiology
PDR Radiology, Pediatric
TR Radiology, Therapeutic
DR Roentgenology, Diagnostic
RHU Rheumatology
RHI Rhinology
ABS Surgery, Abdominal
CDS Surgery, Cardiovascular
CRS Surgery, Colon and Rectal
GS Surgery, General
HS Surgery, Hand
HNS Surgery, Head and Neck
NS Surgery, Neurological
ORS Surgery, Orthopedic
PDS Surgery, Pediatric
PS Surgery, Plastic
TS Surgery, Thoracic
TRS Surgery, Traumatic
U Surgery, Urological

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1. Year of birth [19 ]

*We need the most current information obtainable regarding your education and specialties. Refer to the list of medical and surgical specialties (see left) and select the code(s) which best describes your professional commitments. For example, if "Allergy" applies to you, record "A". If your specialty is not listed, print it in the space(s) provided for Specialty Code.*

2. Current Specialties

| Specialty | Specialty Code (use code at left) | Percent of Professional Time | Years of Practice in This Specialty |
|---|---|---|---|
| a. Primary | | % | |
| b. Secondary | | % | |
| c. All other | | % | |

Total = 100%

3. Education/Training

a. I received my medical degree from

_____
(name of medical school)

in [19 ]

b. *(In responding to this question, insert the appropriate specialty codes, shown on the left, in the boxes provided below. If none, leave the boxes blank.)*

(1) I had at least one full year of residency training in:

[ ] [ ] [ ]

(2) I have completed residency training requirements for certification in:

[ ] [ ] [ ]

(3) I am board (or sub-board) certified in:

[ ] [ ] [ ]

c. I have completed [ ] years of psychoanalytic training.

## G. PERSONNEL AND HOURS WORKED

1. For each type of personnel employed at your principal office, indicate the number of individuals employed and the number of hours per week they spend at that location. For example, if your practice employs one Registered Nurse who works 40 hours per week and three Registered Nurses who work 20 hours per week, then to the right of "Registered Nurse" you would place a "1" in the column headed "35-40" and a "3" in the column headed "20-24".

| Types of Personnel | Number of Hours Per Week | | | | |
|---|---|---|---|---|---|
| | Under 20 | 20-24 | 25-34 | 35-40 | Over 40 |
| Psychiatrist | | | | | |
| Other Physician | | | | | |
| Psychologist | | | | | |
| Social Worker | | | | | |
| Psychiatric Nurse | | | | | |
| Other Registered Nurse | | | | | |
| Assistant trained within your practice | | | | | |
| Psychiatric Aide | | | | | |
| Community Health Aide | | | | | |
| Lab or X-ray Technician | | | | | |
| Secretary/Receptionist | | | | | |
| Other: _____ (Specify) | | | | | |

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APPENDIX C-3

GMENAC DATA FOR PSYCHIATRY

TABLE 5 —DELPHI PANEL ESTIMATES ON THE RATE PER 100,000 OF ADULTS WITH MENTAL DISORDERS REQUIRING CARE, WHO SHOULD SEE A PSYCHIATRIST BY TREATMENT SETTINGS: 1990

| Conditions | Ambulatory | Partial | Acute | 24 Hour | Total |
|---|---|---|---|---|---|
| Schizophrenia and Other Psychoses | 480 | 270 | 180 | 99 | 579 |
| Affective Disorder Psychoses | 960 | 29 | 88 | 20 | 980 |
| Affective Disorder Neuroses | 441 | 90 | 210 | - | 441 |
| Neuroses and Personality Disorders | 297 | 60 | 60 | 20 | 317 |
| Alcohol Addiction | 200 | 30 | 140 | - | 200 |
| Drug Abuse | 50 | 5 | 15 | - | 50 |
| Mental Retardation | 42 | 61 | 19 | 7 | 49 |
| Organic Brain Syndrome | 130 | 100 | 100 | 52 | 182 |
| Other | 198 | 10 | 40 | - | 198 |
| TOTAL | 2,800 | 656 | 853 | 199 | 2,999 |

Taken from Table 5 (p. 24) OGME, Physician Requirements for 1990 for Psychiatry

Table 6 — DELPHI PANEL ESTIMATES ON THE AVERAGE NUMBER OF UNITS OF CARE BY A PSYCHIATRIST PROVIDED PER YEAR OR PER LENGTH OF STAY IN AN ACUTE HOSPITAL FOR EACH CONDITION, BY TREATMENT SETTINGS: 1990

| Conditions | Ambulatory | Partial | Acute | 24 Hour |
|---|---|---|---|---|
| Schizophrenia and Other Psychoses | 24 | 16 | 126 | 24 |
| Affective Disorder Psychoses | 30 | 16 | 90 | 32 |
| Affective Disorder Neuroses | 20 | 8 | 32 | - |
| Neuroses and Personality Disorders | 30 | 8 | 28 | 72 |
| Alcohol Addiction | 24 | 6 | 8 | - |
| Drug Abuse | 24 | 6 | 8 | - |
| Mental Retardation | 24 | 24 | 16 | 24 |
| Organic Brain Syndrome | 24 | 24 | 20 | 24 |
| Other | 52 | 8 | 20 | - |

Taken from Table 6 (p. 25) OGME, Physician Requirements for 1990 for Psychiatry

Table 7 — DELPHI PANEL ESTIMATES ON THE PERCENTAGE DISTRIBUTION OF EACH CONDITION TO THE TOTAL PRACTICE OF PSYCHIATRISTS, BY TREATMENT SETTINGS: 1990

| Conditions | Ambulatory | Partial Hospitalization | Acute Hospitalization | 24 Hour | Total |
|---|---|---|---|---|---|
| Schizophrenia and Other Psychoses | 8.4 | 3.1 | 16.4 | 1.7 | 29.6 |
| Affective Disorder Psychoses | 20.9 | 0.3 | 5.8 | 0.5 | 27.5 |
| Affective Disorder Neuroses | 6.4 | 0.5 | 4.9 | - | 11.8 |
| Neuroses and Personality Disorders | 6.5 | 0.3 | 1.2 | 1.0 | 9.0 |
| Alcohol Addiction | 3.5 | 0.1 | 0.8 | - | 4.4 |
| Drug Abuse | 0.9 | 0.1 | 0.1 | - | 1.0 |
| Mental Retardation | 0.7 | 1.1 | 0.3 | 0.1 | 2.2 |
| Organic Brain Syndrome | 2.3 | 1.7 | 1.5 | 0.9 | 6.4 |
| Other | 7.5 | 0.1 | 0.6 | - | 8.1 |
| TOTAL | 57.1 | 7.1 | 31.5 | 4.2 | 100.0 |

Taken from Table 7 (p. 26) OGME, Physician Requirements in 1990 for Psychiatry

# APPENDIX D

## SUPPLEMENTARY MATERIALS FOR OBSTETRICS/GYNECOLOGY

APPENDIX D-1

ACGME FORMS

a) Version 1
b) Version 2

## CHECK LIST FOR APPLICATIONS TO RESIDENCY REVIEW COMMITTEE FOR OBSTETRICS-GYNECOLOGY

| SECTION | DESCRIPTION | CHECK |
|---|---|---|
| A. | Program Description - Institutions (Pages 1-4) | |
| B. | Letters of Agreement From Affiliates (Academic & Clinical) | |
| C. | Narrative Description of Program (Pages 5-6) | |
| D. | Program Director (Page 7) | |
| E. | Faculty (Page 8) | |
| F. | Residents In Training (Page 9) | |
| G. | Fellows In Training (Page 10) | |
| H. | Residents From Other Programs (Page 11) | |
| I. | Non Ob-Gyn Trainees (Page 12) | |
| J. | Organized Teaching Activities (Page 13) | |
| K. | Research and Publications (Page 14) | |
| L. | Medical Library Facilities (Page 15) | |
| M. | Residency Outline (Page 16) | |
| N. | Obstetric Procedures In Program (Page 17) | |
| O. | Gynecologic Procedures In Program (Page 18) | |
| P. | Ambulatory Services (Teaching Patients) (Page 19) | |
| Q. | Related Special Clinics (Page 19) | |
| R. | Obstetric and Gynecologic Procedures (Experience Level) (Pages 20-23) | |
| S. | Senior Resident Experience Forms (Obstetric & Gynecologic) (Pages 24-25) | |
| T. | Senior Resident Case Lists (Obstetric & Gynecologic) (Pages 26-27) | |
| U. | Status of Residency Training Programs (Page 28) | |

Review and continued accreditation is, of course, contingent upon receipt of completed and accurate copies of the above items. Materials will be returned if any of the items are lacking or if the data are not provided on the enclosed forms.

I certify that I have examined each of the items checked above and that the information provided is complete and accurate.

Program Director _____ Date _____

RESIDENCY REVIEW COMMITTEE FOR OBSTETRICS-GYNECOLOGY
535 North Dearborn Street
Chicago, Illinois 60610

# PROGRAM DESCRIPTION FOR RESIDENCIES IN OBSTETRICS-GYNECOLOGY

Date _____

Name of Program _____

Address _____

City _____ State _____ Zip _____

Program Director _____

Title _____ Phone _____

Accreditation Status: _____ Application _____ Full Accreditation

_____ Provisional _____ Probation

Status Requested: _____ Provisional _____ Full Accreditation

Is this residency program in obstetrics and gynecology directed by a medical school? _____ Yes _____ No

Is this residency program in obstetrics and gynecology associated with a medical school? _____ Yes _____ No

Dean of Medical School _____

Address _____

City _____ State _____ Zip _____

Total length of residency program: _____ 3 Yrs. _____ 4 Yrs. _____ Other

Please attach copy of academic affiliation agreement.

PARENT INSTITUTION A. JCAH APPROVED: _____ YES _____ NO

Name _____

Address _____

City _____ State _____ Zip _____

Level of Ob-Gyn Training* (Circle senior resident level) OBG-1 OBG-2 OBG-3 OBG-4 OBG-5

Length of Assignments _____ _____ _____ _____ _____

INSTITUTION B. JCAH APPROVED: _____ YES _____ NO

Name _____

Address _____

City _____ State _____ Zip _____

Integrated* _____ Affiliated/Extramural Rotation* _____

Distance from Institution A: _____ Miles

Level of Ob-Gyn Training* (Circle senior resident level) OBG-1 OBG-2 OBG-3 OBG-4 OBG-5

Length of Assignments _____ _____ _____ _____ _____

(Attach copy of agreement with participating institution.)

* SEE INSTRUCTIONS FOR DEFINITIONS.

INSTITUTION C. JCAH APPROVED: _____ YES _____ NO

Name _____

Address _____

City _____ State _____ Zip _____

Integrated* _____ Affiliated/Extramural Rotation* _____

Distance from Institution A: _____ Miles

| Level of Ob-Gyn Training* (Circle senior resident level) | OBG-1 | OBG-2 | OBG-3 | OBG-4 | OBG-5 |
|---|---|---|---|---|---|
| Length of Assignments | | | | | |

(Attach copy of agreement with participating institution.)

INSTITUTION D. JCAH APPROVED: _____ YES _____ NO

Name _____

Address _____

City _____ State _____ Zip _____

Integrated* _____ Affiliated/Extramural Rotation* _____

Distance from Institution A: _____ Miles

| Level of Ob-Gyn Training* (Circle senior resident level) | OBG-1 | OBG-2 | OBG-3 | OBG-4 | OBG-5 |
|---|---|---|---|---|---|
| Length of Assignments | | | | | |

(Attach copy of agreement with participating institution.)

* SEE INSTRUCTIONS FOR DEFINITIONS.

INSTITUTION E. JCAH APPROVED: _____ YES _____ NO

Name _____

Address _____

City _____ State _____ Zip _____

Integrated* _____ Affiliated/Extramural Rotation* _____

Distance from Institution A: _____ Miles

| Level of Ob-Gyn Training* (Circle senior resident level) | OBG-1 | OBG-2 | OBG-3 | OBG-4 | OBG-5 |
|---|---|---|---|---|---|
| Length of Assignments | | | | | |

(Attach copy of agreement with participating institution.)

* SEE INSTRUCTIONS FOR DEFINITIONS.

## C. NARRATIVE DESCRIPTION OF PROGRAM

CONCISE ANSWERS ARE PREFERRED.

1. List the educational objectives of the program.

2. Discuss the organization of the department of obstetrics-gynecology, including who appoints the chairman and the length of the chairman's tenure. Is gynecology under the department?

3. Discuss program faculty organization, including who appoints the program director, the length of the program director's tenure, and the appointment and tenure of other full-time faculty.

4. What is the organization of your in-patient teaching service?

5. Explain the rationale for the use of any participating institutions.

6. Describe the methods by which residents gain experience in the following:

   a. Normal obstetrics
   b. High risk obstetrics
   c. Operative gynecology
   d. Gynecologic malignancies
   e. Infertility and endocrinopathies
   f. Pathology
   g. Genetic disorders
   h. Ultrasonography
   i. Family planning
   j. Psychosexual counseling

7. If changes in the number of residents to be appointed are requested, an explicit description of these changes should accompany this material. This should include:

   a. an additional narrative description of how the program and curriculum would be structured with these changes, including a block diagram of all proposed rotations and electives, and
   b. letters of affiliation from proposed new institutions, if any, participating in the program, together with curriculum vitae of department chairmen of these institutions.

8. Discuss procedures developed for the evaluation of:

   a. Residents
   b. Faculty
   c. The above stated educational objectives
   d. Patient care
   e. Former residents

C. NARRATIVE DESCRIPTION OF PROGRAM

CONTINUED

9. Describe any patient population that primarily receives obstetric and gynecologic care from the residents with supervision of the faculty. Describe its relative volume, relationship to the institution sponsoring the residency, and any specific characteristics.

10. Describe any patient population that primarily receives obstetric and gynecologic care from the faculty with the participation of residents. Describe the method by which the residents obtain graduated responsibility with the patient population.

11. What, in your opinion, are areas that might be strengthened in this residency?

## D. PROGRAM DIRECTOR

COMPLETE THE FOLLOWING CURRICULUM VITAE FOR THE PROGRAM DIRECTOR.
PLEASE DO NOT ATTACH COPIES OF OTHER FACULTY VITAE.

What is the term of appointment of the program director? _____

Name _____

Office Address _____

Phone _____

Post-graduate education (Institutions and dates):

Major professional work experience (Locations, nature of position or title, dates to present):

Duties in current position and how they relate to this program:

Licensure:

Certification:

ABOG Yes _____ Date _____ No _____

Other (Specify) _____

## E. FACULTY

LIST BELOW (UP TO 20 IN NUMBER) THOSE WHO PARTICIPATE DIRECTLY AND REGULARLY IN THE TEACHING PROGRAM, INCLUDING NON-CLINICAL FACULTY AND OTHER SPECIALISTS. PLEASE DO NOT ATTACH COPIES OF FACULTY VITAE.

| NAME | YR. CERT. BY ABOG | SUB-SPEC. CERT. SPECIFY & YR. | PRIMARILY AT INSTITUTION (A,B, C,D,E) | SPECIFIC TEACHING RESPONSIBILITIES | % OF PRACTICE IN PRIMARY HOSPITAL | AMOUNT OF TIME IN TEACHING | |
|---|---|---|---|---|---|---|---|
| | | | | | | MOS/YR ON TEACHING SERVICE | HRS/WK ON TEACHING SERVICE |
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## F. RESIDENTS IN TRAINING

FOR ACADEMIC YEAR ENDING: _____

| LEVEL OF OB-GYN TRAINING: | OBG-1 | OBG-2 | OBG-3 | OBG-4 | OBG-5 |
|---|---|---|---|---|---|
| CURRENTLY ON DUTY | | | | | |
| CURRENTLY APPROVED | | | | | |
| REQUESTED | | | | | |

LIST ALPHABETICALLY BY LEVEL BEGINNING WITH THOSE IN SENIOR YEAR.

| NAME | YR. IN OB-GYN PROGRAM | MEDICAL SCHOOL & YR. OF GRADUATION | DATE OB-GYN TRAINING STARTED | DATE OB-GYN TO BE COMPLETED |
|---|---|---|---|---|
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## G. FELLOWS IN TRAINING

| NAME | SUB-SPECIALTY | DATE FELLOWSHIP ENDS | AT INST. A,B,C,D,E * |
|---|---|---|---|
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* INSTITUTIONS AS LISTED ON PAGES 2-4.

H. OB-GYN RESIDENTS FROM OTHER INSTITUTIONS OR PROGRAMS WHO RECEIVE ANY TRAINING IN THIS PROGRAM

FOR ACADEMIC YEAR ENDING: _____

| NAME | LEVEL OF OB-GYN TRAINING* | PARENT INSTITUTION OR PROGRAM | DURATION OF THIS ASSIGN. | HOSP. USED AND SPECIFIC ASSIGNMENT(S) |
|---|---|---|---|---|
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* OBG-1, OBG-2, OBG-3, OBG-4, OBG-5

## I. NON OB-GYN TRAINEES PER YEAR ASSIGNED TO THIS PROGRAM

FOR ACADEMIC YEAR ENDING: _____

CATEGORIES:
- FAMILY PRACTICE RESIDENTS
- SURGICAL RESIDENTS
- MEDICAL RESIDENTS
- PEDIATRIC RESIDENTS
- MEDICAL STUDENTS
- NURSE MIDWIVES
- NURSE PRACTITIONERS
- OTHER (SPECIFY)

| NUMBER | CATEGORY OF TRAINEE | LENGTH OF ASSIGN. PER INDIVIDUAL | AT. INST. A,B,C,D,E |
|---|---|---|---|
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## J. ORGANIZED TEACHING ACTIVITIES

List all the regularly scheduled educational activities of this program, including teaching rounds, clinical case conferences, gynecologic pathology conferences, interdepartmental conferences, specialty conferences, seminars, and other functions held primarily for the benefit of your residents. Designate whether the activity is required (R), optional (O), or required of residents only when they are on that particular service (RS).

Please indicate those activities into which basic sciences (BS), genetics (G), and medical jurisprudence (MJ) are integrated into these activities.

| NAME OF ACTIVITY | R/O/RS | FREQUENCY PER MONTH | CONDUCTED OR SUPERVISED BY | INDICATE IF BS,G,MJ |
|---|---|---|---|---|
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## K. RESEARCH AND PUBLICATIONS

A. List not more than 10 major research projects being conducted in the program by members of the staff and indicate with an asterisk those projects in which residents are participating.

B. List not more than 10 representative publications of the past two years by members of the active teaching staff or residents in the training program. Please supply titles and complete journal references.

## L. MEDICAL LIBRARY FACILITIES

1. Describe the hospital and/or departmental medical library facilities and services immediately available to the residents. Indicate location, the total number of journals and texts, hours of access, etc. List the current obstetrics-gynecology journals received.

2. Describe size and availability of additional library facilities accessible to the residents, such as a medical school. State the distance from the hospital to these facilities.

3. Describe the audio-visual materials available, their location, hours of access, etc.

4. Is there computer assisted literature search at your own library? _____
   At another accessible library? _____

## M. RESIDENCY OUTLINE

Please submit in block form an outline of each resident assignment. Indicate the periods of time in each block that are appropriate for your program. If the rotations are not uniform for each resident then submit a separate block diagram for each track or hospital.

### S A M P L E

| LEVEL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SPECIFIC ASSIGNMENT | Labor & Delivery | Priv. Gyn | Ob | Oncology | Endocrine | Gyn | E.R. | Perinat. |
| INSTITUTION A,B,C,D,E* | A | A | B | C | A | B | C | C |

### T H I S  P R O G R A M

| LEVEL OBG-1 | |
|---|---|
| SPECIFIC ASSIGNMENT | |
| INSTITUTION A,B,C,D,E* | |

| LEVEL OBG-2 | |
|---|---|
| SPECIFIC ASSIGNMENT | |
| INSTITUTION A,B,C,D,E* | |

| LEVEL OBG-3 | |
|---|---|
| SPECIFIC ASSIGNMENT | |
| INSTITUTION A,B,C,D,E* | |

| LEVEL OBG-4 | |
|---|---|
| SPECIFIC ASSIGNMENT | |
| INSTITUTION A,B,C,D,E* | |

| LEVEL OBG-5 | |
|---|---|
| SPECIFIC ASSIGNMENT | |
| INSTITUTION A,B,C,D,E* | |

* IDENTIFY INSTITUTIONS AS LISTED ON PAGES 2-4.

## N. OBSTETRIC PROCEDURES IN PROGRAM

STATISTICS FOR 12 MONTHS: FROM _____ (Month/Year) TO _____ (Month/Year)

| | INSTITUTION* | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | TOTAL |
| 1. TOTAL OBSTETRICS PATIENTS ADMITTED OR DISCHARGED | | | | | | |
| 2. TOTAL NUMBER OF DELIVERIES | | | | | | |
| 3. TOTAL NUMBER OF CESAREAN SECTIONS | | | | | | |
| 4. NUMBER OF PRIMARY CESAREAN SECTIONS | | | | | | |
| 5. PERCENT OF PATIENTS MONITORED IN LABOR | | | | | | |
| 6. PERINATAL MORTALITY RATE ** | | | | | | |
| 7. NUMBER OF POSTPARTUM STERILIZATIONS | | | | | | |
| 8. PERCENT OF OBSTETRICS PATIENTS AVAILABLE TO RESIDENTS | | | | | | |
| 9. PREGNANCY TERMINATION: | | | | | | |
| A. INTRAAMNIOTIC INJECTION (OUTPATIENT AND INPATIENT) | | | | | | |
| B. UTERINE EVACUATION | | | | | | |
| C. OTHER | | | | | | |

* INSTITUTIONS AS LISTED ON PAGES 2-4.

** DEFINED AS FETAL DEATHS FROM 20 WEEKS GESTATION PLUS NEONATAL DEATHS TO 28 DAYS OF LIFE EXPRESSED IN DEATHS/1000 BIRTHS.

## O. GYNECOLOGIC PROCEDURES IN PROGRAM

STATISTICS FOR 12 MONTHS: FROM _____ (Month/Year) TO _____ (Month/Year)

| | INSTITUTION* | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | TOTAL |
| 1. TOTAL GYN. PATIENTS ADMITTED OR DISCHARGED PER YEAR | | | | | | |
| 2. TOTAL MAJOR GYNECOLOGIC OPERATIONS** | | | | | | |
| 3. TOTAL MINOR GYNECOLOGIC OPERATIONS** | | | | | | |
| 4. NUMBER OF RADICAL PELVIC PROCEDURES FOR MALIGNANT DISEASE | | | | | | |
| 5. NUMBER OF ABDOMINAL HYSTERECTOMIES | | | | | | |
| 6. NUMBER OF OTHER LAPAROTOMIES | | | | | | |
| 7. NUMBER OF VAGINAL HYSTERECTOMIES | | | | | | |
| 8. NUMBER OF LAPAROSCOPIC PROCEDURES FOR THERAPY | | | | | | |
| 9. NUMBER OF LAPAROSCOPIC PROCEDURES FOR DIAGNOSIS | | | | | | |
| 10. NUMBER OF DIAGNOSTIC D&C'S | | | | | | |
| 11. GYN. ADMISSIONS FOR MALIGNANT DISEASE (EXCLUDING CERVICAL DYSPLASIA, CIS) | | | | | | |
| 12. NUMBER OF BRACHYTHERAPY APPLICATIONS FOR MALIGNANT DISEASE | | | | | | |
| 13. PERCENT OF GYN. PATIENTS AVAILABLE TO RESIDENTS | | | | | | |

* INSTITUTIONS AS LISTED ON PAGES 2-4.

** DEFINED AS FOLLOWS:

MAJOR SURGICAL PROCEDURES:

THE NUMBER OF PATIENTS WHO HAD SURGICAL PROCEDURES WHICH INVOLVED ENTERING THE PERITONEAL SPACE, OR WHICH INVOLVED EXTENSIVE DISSECTION OR EXCISION (HYSTERECTOMY, LAPAROSCOPIC STERILIZATION, LAPAROSCOPY, COLPORRHAPHY, VULVECTOMY, ANY ADNEXAL PROCEDURE, FISTULA REPAIR OR URETHROPEXY).

MINOR SURGICAL PROCEDURES:

THE NUMBER OF PATIENTS WHO HAD SURGICAL PROCEDURES NOT QUALIFYING AS MAJOR PROCEDURES (D&C, SUCTION CURETTAGE, BIOPSY, CONIZATION, BARTHOLIN DUCT MARSUPIALIZATION).

P. AMBULATORY SERVICES (TEACHING PATIENTS)

| INSTITUTION | DIRECTOR OF CLINICS/SERVICES | # OF NEW OB. PTS.* | TOTAL OB. VISITS | # OF NEW GYN. PTS. | TOTAL GYN. VISITS | # OF EMERGENCY ROOM PATIENTS SEEN BY OB-GYN RESIDENTS |
|---|---|---|---|---|---|---|
| A. | | | | | | |
| B. | | | | | | |
| C. | | | | | | |
| D. | | | | | | |
| E. | | | | | | |

Q. RELATED SPECIAL CLINICS INCLUDED IN ABOVE TOTALS

| INSTITUTION** | TYPE OF CLINIC/SERVICE | TOTAL OB. VISITS | TOTAL GYN. VISITS, NEW AND RETURN | DIRECTOR CLINIC/SERVICE |
|---|---|---|---|---|
| | | | | |
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* EACH PREGNANCY CONSIDERED AS NEW OBSTETRICS PATIENT.

** IDENTIFY BY LETTERS AS LISTED ON PAGES 2-4.

## R. OBSTETRIC AND GYNECOLOGIC DIAGNOSTIC AND THERAPEUTIC TECHNICAL PROCEDURES

Check the type of experience usually achieved by ALL residents who have most recently completed the program. Use only one check mark per line to indicate most common level of education.

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| OBSTETRIC PROCEDURES: | | | |
| Amniocentesis for genetic studies | | | |
| Amniocentesis for fetal monitoring | | | |
| Electronic fetal monitoring in labor | | | |
| Electronic fetal monitoring before labor | | | |
| Fetal scalp sampling | | | |
| General anesthesia | | | |
| Regional anesthesia (spinal, saddle, epidural, caudal) | | | |
| Intubation of newborn | | | |
| Sonography (real time or static) | | | |
| Stress testing | | | |
| MANAGEMENT OF: | | | |
| Pregnant diabetic | | | |
| Premature labor | | | |
| Molar pregnancy | | | |
| Severe pre-eclampsia and eclampsia | | | |
| Isoimmunization | | | |
| Premature rupture of membranes | | | |
| Intrauterine growth retardation | | | |
| Pregnant cardiac | | | |
| High risk newborn | | | |

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| EXTERNAL GENITALIA: | | | |
| Simple vulvectomy | | | |
| Perineorrhaphy | | | |
| Management of large hematoma | | | |
| VAGINA: | | | |
| Construction of new vagina | | | |
| Repair of: | | | |
| vesico-vaginal fistula | | | |
| recto-vaginal fistula | | | |
| enterocoele | | | |
| vaginal prolapse | | | |
| suburethral diverticulum | | | |
| Retropubic urethropexy | | | |
| UTERUS, VAGINAL: | | | |
| Diagnostic D&C | | | |
| Suction curettage | | | |
| Cerv. cautery or cryosurgery | | | |
| Cold knife conization | | | |
| Circlage for incompetent cervix | | | |
| Removal of cervical stump | | | |
| Culdocentesis | | | |
| Posterior colpotomy | | | |
| Brachytherapy | | | |
| Vaginal hysterectomy | | | |
| UTERUS, ABDOMINAL: | | | |
| Cesarean hysterectomy | | | |
| Abdominal hysterectomy | | | |
| Myomectomy | | | |
| Uterine unification | | | |
| Uterine suspension | | | |

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| OVIDUCTS: | | | |
| Hysterosalpingogram | | | |
| Salpingectomy | | | |
| Laparoscopy, operative | | | |
| Laparoscopy, diagnostic | | | |
| Tubal re-implantation | | | |
| Tubal reconstruction | | | |
| OVARY: | | | |
| Wedge resection or biopsy | | | |
| Oophorectomy during 2nd or 3rd trimester | | | |
| Cystectomy | | | |
| OTHER PELVIC STRUCTURES: | | | |
| Exposure of iliac vessels | | | |
| Ligation of hypogastric artery | | | |
| Repair of major vessels | | | |
| Exposure of ureter | | | |
| Ureteral repair | | | |
| Exposure of obturator nerve | | | |
| Sigmoidoscopy | | | |
| Repair of small bowel injury | | | |
| Repair of large bowel injury | | | |
| Colostomy | | | |
| Cystoscopy | | | |
| Repair of bladder injury | | | |
| GYNECOLOGIC ONCOLOGY: | | | |
| Radical vulvectomy | | | |
| Radical hysterectomy | | | |
| Bowel resection & anastomosis | | | |
| Pelvic exenteration | | | |
| Urinary diversion | | | |
| Peri-aortic node excision | | | |

| OTHER PROCEDURES: | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| Repair abdominal wound dehiscence | | | |
| Hyperalimentation | | | |
| Thoracentesis | | | |
| Paracentesis | | | |
| Cystometrogram | | | |
| Breast biopsy/aspiration | | | |
| Insertion of subclavian line | | | |
| Insertion of arterial line | | | |
| Evacuation of retroperitoneal hematoma | | | |

## S. RESIDENT EXPERIENCE IN OBSTETRICS

NAME _____ FROM _____ TO _____
First, Last Month/Year Month/Year

Please complete for each resident most recently completing the program with totals in each category for entire resident experience in the program. Categories are defined as follows:

COMPLETE MANAGEMENT:

RESIDENT WORKS UP PATIENT, WRITES ORDER, DISCUSSES CARE WITH ATTENDING PHYSICIAN. RESIDENT PERFORMS 50% OR MORE OF THE SURGICAL PROCEDURE, IF ONE IS PERFORMED, AND CARES FOR THE PATIENT POSTOPERATIVELY UNDER SUPERVISION.

OPERATIVE MANAGEMENT:

RESIDENT HAS LITTLE INVOLVEMENT IN THE PRE AND/OR POST OPERATIVE CARE OF THE PATIENT BUT PERFORMS 50% OR MORE OF THE SURGICAL OPERATION UNDER SUPERVISION.

SURGICAL ASSISTANT:

RESIDENT SERVES AS FIRST ASSISTANT AT SURGERY PERFORMING LESS THAN 50% OF THE SURGICAL PROCEDURE.

| PROCEDURE | COMPLETE MANAGEMENT | OPERATIVE MANAGEMENT | SURGICAL ASSISTANT |
|---|---|---|---|
| Cesarean Section | | | |
| Spontaneous Deliveries | | | |
| Low Forceps Deliveries | | | |
| Mid-Forceps Deliveries | | | |
| Breech Deliveries (Vaginally) | | | |
| Twin Deliveries (Vaginally) | | | |
| Fetal Scalp Blood Sampling | | | |
| Neonatal Intubations for Resuscitation | | | |
| Conduction Anesthesia (e.g. Epidural, Saddle, etc.) | | | |

## S. RESIDENT EXPERIENCE WITH IN-PATIENT GYNECOLOGY

NAME _____ FROM _____ TO _____
Last, First Month/Year Month/Year

Please complete for each resident most recently completing the program with totals in each category for entire resident experience in the program. Categories are defined as follows:

COMPLETE MANAGEMENT:

RESIDENT WORKS UP PATIENT, WRITES ORDER, DISCUSSES CARE WITH ATTENDING PHYSICIAN. RESIDENT PERFORMS 50% OR MORE OF THE SURGICAL PROCEDURE, IF ONE IS PERFORMED, AND CARES FOR THE PATIENT POSTOPERATIVELY UNDER SUPERVISION.

OPERATIVE MANAGEMENT:

RESIDENT HAS LITTLE INVOLVEMENT IN THE PRE AND/OR POST OPERATIVE CARE OF THE PATIENT BUT PERFORMS 50% OR MORE OF THE SURGICAL OPERATIONS UNDER SUPERVISION.

SURGICAL ASSISTANT:

RESIDENT SERVES AS FIRST ASSISTANT AT SURGERY PERFORMING LESS THAN 50% OF THE SURGICAL PROCEDURE.

| PROCEDURE | COMPLETE MANAGEMENT | OPERATIVE MANAGEMENT | SURGICAL ASSISTANT |
|---|---|---|---|
| Abdominal Hysterectomy (with or without removal of adnexa) | | | |
| Vaginal Hysterectomy | | | |
| Vaginal Hysterectomy with Vaginal Repair | | | |
| Other Major Vaginal Surgery | | | |
| Vulvectomy (Simple & Radical) | | | |
| Laparoscopy (Diagnostic & Operative) | | | |
| Application of Brachytherapy Devices | | | |
| Retropubic Urethropexy | | | |
| Tubal Reanastamosis and Re-Implantation | | | |
| Repair of Dehiscence | | | |

T. SENIOR RESIDENT CASE LIST OF MAJOR GYNECOLOGIC INPATIENT SURGICAL PROCEDURES (EXCEPT LAPAROSCOPIES)

SENIOR RESIDENT'S NAME _____ FROM _____ TO _____
Last, First Month/Year Month/Year

List to be compiled by the resident during the last year of residency with patients managed solely by the senior resident under supervision or in concert with an attending physician when the senior resident played a major role in the management.

| INITIALS OR HOSP. NO. | AGE | PARA | DIAGNOSIS PREOPERATIVE OR ADMISSION | TREATMENT | HISTOPATHOLOGIC DIAGNOSIS | COMPLICATIONS | DAYS IN HOSP. |
|---|---|---|---|---|---|---|---|
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# STATUS OF GRADUATE TRAINING PROGRAMS

In: _____

(Name of hospital, city and state)

Please supply information on the residency programs carried on in your hospital, for the information of the Review Committee(s) that will evaluate the survey(s) being carried on at this time. Copies should be prepared to accompany the report of the member of the Field Staff on each program being reviewed at this time. All copies should be identical, as they should reflect the status of all graduate programs currently carred on in the hospital.

| GRADUATE TRAINING PROGRAM | PRESENT STATUS OF ALL GRADUATE PROGRAMS<br>Place an X in the proper column. | | HOUSE STAFF (RESIDENT) POSITIONS | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Number Filled | | | |
| | Approved Program | Application or Re-application | Number Offered (total) | Foreign Graduates | Other Graduates | Total Filled | Positions Vacant |
| Initial Year of Grad. Educ. (Flexible Year) | | | | | | | |
| Allergy and Immunology | | | | | | | |
| Anesthesiology | | | | | | | |
| Colon and Rectal Surgery | | | | | | | |
| Dermatology | | | | | | | |
| Dermatopathology | | | | | | | |
| Family Practice | | | | | | | |
| Internal Medicine | | | | | | | |
| Neurological Surgery | | | | | | | |
| Neurology | | | | | | | |
| Nuclear Medicine | | | | | | | |
| Obstetrics-Gynecology | | | | | | | |
| Ophthalmology | | | | | | | |
| Orthopaedic Surgery | | | | | | | |
| Otolaryngology | | | | | | | |
| Pathology - Anat. Clin. | | | | | | | |
| Pathology - Forensic | | | | | | | |
| Pathology - Neuropathology | | | | | | | |
| Pathology - Blood Banking | | | | | | | |
| Pediatrics | | | | | | | |
| Pediatric Cardiology | | | | | | | |
| Physical Medicine and Rehab. | | | | | | | |
| Plastic Surgery | | | | | | | |
| Psychiatry | | | | | | | |
| Psychiatry - Child Psychiatry | | | | | | | |
| Radiology w/ Special Competence in Nuclear Radiology | | | | | | | |
| Radiology - Diagnostic | | | | | | | |
| Radiology - Therapeutic | | | | | | | |
| Surgery | | | | | | | |
| Thoracic Surgery | | | | | | | |
| Urology | | | | | | | |
| Preventitive Medicine - General | | | | | | | |
| Prev. Med. - Aerospace Med. | | | | | | | |
| Prev. Med. - Occupational Med. | | | | | | | |
| Prev. Med. - Public Health | | | | | | | |
| TOTAL POSITIONS: | | | | | | | |

RESIDENCY REVIEW COMMITTEE FOR OBSTETRICS-GYNECOLOGY
Council on Medical Education, American Medical Association
535 North Dearborn Street, Chicago, Illinois 60610
(Read instructions before filling out this form)

# PROGRAM DESCRIPTION FOR RESIDENCIES IN OBSTETRICS AND GYNECOLOGY

Date_____

A PARENT INSTITUTION
Name Address:

Length of assignment (in months)
1st year_____ 2nd year_____ 3rd year_____ 4th year_____

B OTHER INSTITUTION
Name Address:

Integrated or Affiliated*_____ Distance between 2 & 1_____(miles)

Length of assignment (in months)
1st year_____ 2nd year_____ 3rd year_____ 4th year_____

C OTHER INSTITUTION
Name Address:

Integrated or Affiliated*_____ Distance between 3 & 1_____(miles)

Length of assignment (in months)
1st year_____ 2nd year_____ 3rd year_____ 4th year_____

D OTHER INSTITUTION
Name Address:

Integrated or Affiliated*_____ Distance between 4 & 1_____(miles)

Length of assignment (in months)
1st year_____ 2nd year_____ 3rd year_____ 4th year_____

Attach a confirming letter from each hospital involved in your program

CHECK TYPE OF PROGRAM Intramural_____ Integrated_____ Affiliated_____*
* See Guide for definitions

Program Director_____ Title_____

Address of institution_____

Signature_____ Telephone: Area Code_____ Number_____

Information furnished by_____ Official Position_____
(If same as Program Director, leave blank)

4. List below (up to 20 in number) those physicians who participate directly and regularly in the teaching program. Prepare a separate list for each institution in the program.

| Name | Year of Birth | Cert. by ABOG | % Practice in Program Hospitals | | Full-time for Hospital or School | Part time | |
|---|---|---|---|---|---|---|---|
| | | | | | | Hrs per week | Months per year |
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5. Trainees currently in program:

Hospital year from _____ to _____

Number approved by Residency Review Committee: 1_____ 2_____ 3_____ 4_____ 5_____

Number now in program, by year: 1_____ 2_____ 3_____ 4_____

(Include all categorical and categorical* trainees)

| Trainee's Name | Year of M.D. | Medical School from which Graduated | U.S. citizen indicate yes or no | Year of Residency in this Program |
|---|---|---|---|---|
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Other trainees in this program at any one time:

a. Obstetrics-Gynecology residents from other programs _____
b. Nurse Obstetricians/Practitioners/Midwives _____
c. Family Practice residents _____
d. Medical students _____
e. Fellows _____
f. Other _____

Number of flexible first-year trainees assigned to obstetrics-gynecology _____

6. Organized Teaching Activities

List the scheduled activities of this program, such as teaching rounds, clinical case conferences, gynecologic pathology conferences, seminars, and other functions held primarily for the benefit of your residents

| Name of Activity | Frequency per mo | Conducted or Supervised by |
|---|---|---|
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6a. First Obstetrics-Gynecology Graduate Year

1) Number of First Obstetrics-Gynecology Graduate Year Positions

| | Now Approved | Now Filled |
|---|---|---|
| 1) Ob -Gyn Categorical | | |
| Ob -Gyn Categorical* | | |
| Other | | |

2) What is the rotational plan for First Obstetrics-Gynecology Graduate Year Physicians

| | |
|---|---|
| Ob -Gyn Categorical | |
| Ob -Gyn Categorical | |
| Other | |

6b. Other Trainees on your Service at any one time

1) Fellows:

Oncology_____

Perinatal_____

2) Residents from other training programs at any one time_____

## Relationship with Other Hospital Departments at the Residency Program Level

7. ANESTHESIOLOGY

Are Ob-Gyn residents instructed by anesthesia service? _____

For how many months? _____ Do they have Ob-Gyn duties in same time block? _____

Do Ob-Gyn residents provide anesthesia regularly for their own patients? _____

_____

Anesthesia instruction supervised by: Obstetrician-gynecologist _____

Qualified anesthesiologist _____ Other variety of physician _____

Nurse-anesthetist _____

8. PATHOLOGY

Describe assignment, if any, to pathology (length of time, year of residency, degree of integration with clinical duties, specific learning experiences in pathology, nature and frequency of inter-departmental conferences

9. RADIATION THERAPY

Describe the participation of Ob-Gyn residents in care and follow-up patients with gynecologic cancer. How is responsibility for these patients divided between radiotherapy staff and gynecologic staff?

10. PEDIATRICS

Do Ob-Gyn residents provide newborn care in delivery room? _____

Who is responsible for subsequent hospital care of newborn? _____

_____

11. GENERAL SURGERY

Are Ob-Gyn residents assigned to Dept. of Surgery?_____If so, in what year of Ob-Gyn Program? _____

Full-time for_____months_____year

If not full-time, how integrated with Ob-Gyn? _____

Are surgical residents assigned to Ob-Gyn?_____How many?_____

If so, what year of their program?_____Rotation with group in_____year of Ob-Gyn program? How long does each surgical resident spend on Ob-Gyn?_____months.

Are any gynecologic operations performed by general surgeons? _____

Which residents assist with these cases? _____

Are such cases included in the statistical totals of gynecologic operations in this report? _____

12. OTHER ASSIGNMENTS OF OB-GYN RESIDENTS

Describe nature and duration of assignment; state whether full-time, or, if not, show how integrated with usual clinical duties.

Use this space, if necessary, for additional clarifying comments about any of the services described above

13 Research and Publications:

A. List major research projects (not more than 10) being conducted in the program by members of the staff and indicate in which residents are participating.

B. List not more than 10 representative publications of the past two years by members of the active teaching staff or residents in the training program. Please supply precise titles and complete journal references.

14. Medical Library Facilities:

1) In following hospital(s) _____

_____

2) Medical school departmental library._____ Yes_____ No_____

3) Nearby medical school or other library: _____

_____

4) List below important obstetric and gynecologic or subspecialty journals available to residents (maximum of 15):

5) Describe the audiovisual materials used:

15. In-Patient Obstetric Procedures:

Hospital statistics for 12 months from _____ to _____

| | Hospitals* | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | Total |
| A Total obstetric patients discharged per year | | | | | |
| B Number of deliveries per year | | | | | |
| C Cesarean sections - yearly total | | | | | |
| D Other major procedures - Total | | | | | |

16. In-Patient Gynecology Procedures:

Hospital statistics for 12 months from _____ to _____

| | Hospitals* | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | Total |
| A Total gynecologic patients discharged per year | | | | | |
| Number of operations per year ** | | | | | |
| B Total major gynecologic operations ** | | | | | |
| C Total minor gynecologic operations | | | | | |

* Institutional names listed on Page 1

** Instances of multiple procedures at one sitting count only one procedure per patient. The total number of operative procedures therefore, should never exceed the number of patients admitted to the service

17. Out-Patient Services (teaching patients)

| Institution | New* Obstetric Patients | Total Obstetric Visits | New Gynecologic Patients | Total Gynecologic Visits | Emergency Room Consultations by Ob-Gyn Residents |
|---|---|---|---|---|---|
| A | | | | | |
| B | | | | | |
| C | | | | | |
| D | | | | | |

Related Special clinics (e.g., toxemia, high risk, endocrine, etc.), included in above totals

| Institution** | Type Clinic | Frequency*** per month | Approximate No. of Visits per Clinic Session | Director of Special Clinic |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

* Each pregnancy considered as new obstatric patient.

** identify by letters as listed on page 1

***Sessions per month, as before

18. TOTAL EXPERIENCE IN GYNECOLOGY OF A RESIDENT UPON COMPLETION OF THE PROGRAM*

Doctor: _____

While a resident at:** _____

Dates of Service: _____

_____

| PROCEDURE | Total Responsibility for Patient Care | Technical Operative Responsibility | First Assistant | Total Number of Cases |
|---|---|---|---|---|
| A. MAJOR | | | | |
| 1. Abdominal hysterectomy with/without adnexa | | | | |
| 2. Oophorectomy and/or Salpingectomy | | | | |
| 3. Tubal ligation | | | | |
| 4. Vaginal hysterectomy with/without repair | | | | |
| 5. Vaginal repair, anterior, posterior, or both | | | | |
| 6. Major abdominal or vaginal procedure not listed above | | | | |
| SUBTOTAL: | | | | |
| B. MINOR | | | | |
| 1. Insertion of radium | | | | |
| 2. Conization and/or amputation of cervix | | | | |
| 3. Minor vaginal operation including curettage | | | | |
| SUBTOTAL | | | | |
| TOTAL PROCEDURES | | | | |

* Submit additional sheet for each resident completing program in this year.

**Instructions: If any significant proportion was performed in affiliated hospitals, please indicate on an auxiliary sheet for each hospital.

19. TOTAL EXPERIENCE IN OBSTETRICS OF A RESIDENT UPON COMPLETION OF THE PROGRAM *

Doctor: _____

Dates of Service: _____

| PROCEDURE | RESPONSIBILITY FOR PATIENT CARE | | | |
|---|---|---|---|---|
| | Total Responsibility for Patient Care | Technical Operative Responsibility | First Assistant | Total Number of Cases |
| Cesarean sections | | | | |
| Other Procedures | | | | |
| a Spontaneous deliveries | | | | |
| b Outlet forceps | | | | |
| c Other forceps | | | | |
| d Breech deliveries | | | | |
| e Twin deliveries | | | | |
| f Miscellaneous | | | | |
| TOTAL OF OTHER PROCEDURES | | | | |
| GRAND TOTAL | | | | |

* Submit additional sheet for each resident completing program in this year.

| Pregnancy Interruptions | By Staff | By Residents |
|---|---|---|
| Simple vaginal | | |
| Other | | |

19a. Care of the Ambulatory Patient

a) Describe the degree of responsibility assumed by residents with regard to ambulatory patients and the supervisory activity of the attending staff therefor.

b) At what stage of training and for how many months is out-patient (or office) experience a primary assignment?

c) How many hours a week at each stage of training does the resident spend in the out-patient department?

d) For what proportion of the resident's time in out-patient activity is the attending present?

NOTE: This data is to be completed by the surveyor and not by the Program Director

19b. On the occasion of surveys, residents will be asked to furnish the following information:

a) How much of the assigned time with ambulatory patients can he count on for being present?

b) How does the resident feel about the effectiveness of OPD (or office) assignment? What is the nature of his activity?

c) How many prenatal cases at any time does the resident follow, on the whole, while assigned to obstetrics? Is this enough, to much?

d) What provisions are made in the program for the resident to follow particular patients over a prolonged period of time? Should there be more or less of this?

## 20. OUTLINE OF THE RESIDENCY

**Please** submit in block form an outline of each resident assignment. Indicate the periods of time in each block that **are** appropriate for your program.

EXAMPLE

| | 3 months | 3 months | 3 months | 3 months |
|---|---|---|---|---|
| First Year | Labor Floor (Hospital A) | Post Partum Floor → Out Pt Clinic | Labor Floor | Post Partum Floor → Out Pt Clinic |
| | 3 months | 3 months | 3 months | 3 months |
| Second Year | Asst Resident Gyn Service | Oncology Service → Out Pt Clinic | Asst Resident Gyn Service (Hospital B) | Oncology Service → Out Pt Clinic |
| | 6 months | | 6 months | |
| Third Year | Resident - Gyn (Hospital B) | | Resident - Ob (Hospital A) | |

YOUR PROGRAM

| | |
|---|---|
| First Year | |
| Second Year | |
| Third Year | |
| Fourth Year | |
| Fifth Year | |

Additional remarks

## 21. NARRATIVE DESCRIPTION OF RESIDENCY PROGRAM IN OBSTETRICS-GYNECOLOGY

This is a most important part of your application. The Review Committee must determine whether a truly educational experience in Obstetrics-Gynecology is offered by your program as it is presented. The Committee recognizes that many variations exist among excellent residency programs and it does not intend to design or dictate curriculum.

In addition to the material already provided, additional or expanded information of significance relative to the following points will be helpful in evaluating your program. The following items are examples of points that are of interest to the Committee, but they do not require answers if not pertinent to your program or if you feel adequate information has already been supplied. Brevity will be appreciated.

a. What is the organization of your in-patient teaching service?
b. Describe how continuity of responsibility for patient care is assured, including night and week-end duty.
c. If private patients are included in your program, describe the manner in which they are utilized and the relationships and responsibilities of the residents to them.
d. Are there separate sub-specialty services and if so, how does the resident participate in them?
e. How are the teaching staff members selected and how long are they on service at one time?
f. Describe the resident's teaching responsibilities.
g. Describe any other features that you believe would be of interest to the Residency Review Committee.
h. What, in your opinion, are areas that might be strengthened in this residency?

APPENDIX D-2

SAMPLE PAGES FROM THE USC
PRACTICE PROFILE LOG DIARY:

a) Week's Practice Summary

b) Activity Overview

c) Patient Encounter Section

d) Questionnaire: Training and
Ancillary Personnel

| DAY OF THE WEEK | TELEPHONE CALLS WITH HEALTH PROFESSIONALS | TYPES OF PATIENT ENCOUNTERS | | | | TOTAL PROFESSIONAL HOURS (Excluding On Call) |
|---|---|---|---|---|---|---|
| | | TELEPHONE CALLS WITH PATIENTS | PATIENTS SEEN BY YOU: OUTPATIENTS | PATIENTS SEEN BY YOU: INPATIENTS | PATIENTS SEEN BY OTHER STAFF ONLY | |
| SUNDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| MONDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| TUESDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| WEDNESDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| THURSDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| FRIDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |
| SATURDAY / / Mo. Day Yr. | ☐ | ☐ | ☐ | ☐ | ☐ | |

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*Estimate the total number of outpatient/inpatient encounters you personally have during a typical week. If you do not normally see patients, record "0".* ☐

PART I: WEEK'S PRACTICE SUMMARY

/ /
Mo. Day Yr.
Date

**INSTRUCTIONS** For each time interval, select the ONE Activity Code on the right that best describes your activities during that period. Use arrows to indicate activities continued through more than one interval. Insert today's date in the space provided.

| BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE | BEGIN TIME | ACTIVITY CODE |
|---|---|---|---|---|---|---|---|
| Midnight | | AM 6:00 | | Noon | | PM 6:00 | |
| AM 12:15 | | AM 6:15 | | PM 12:15 | | PM 6:15 | |
| AM 12:30 | | AM 6:30 | | PM 12:30 | | PM 6:30 | |
| AM 12:45 | | AM 6:45 | | PM 12:45 | | PM 6:45 | |
| AM 1:00 | | AM 7:00 | | PM 1:00 | | PM 7:00 | |
| AM 1:15 | | AM 7:15 | | PM 1:15 | | PM 7:15 | |
| AM 1:30 | | AM 7:30 | | PM 1:30 | | PM 7:30 | |
| AM 1:45 | | AM 7:45 | | PM 1:45 | | PM 7:45 | |
| AM 2:00 | | AM 8:00 | | PM 2:00 | | PM 8:00 | |
| AM 2:15 | | AM 8:15 | | PM 2:15 | | PM 8:15 | |
| AM 2:30 | | AM 8:30 | | PM 2:30 | | PM 8:30 | |
| AM 2:45 | | AM 8:45 | | PM 2:45 | | PM 8:45 | |
| AM 3:00 | | AM 9:00 | | PM 3:00 | | PM 9:00 | |
| AM 3:15 | | AM 9:15 | | PM 3:15 | | PM 9:15 | |
| AM 3:30 | | AM 9:30 | | PM 3:30 | | PM 9:30 | |
| AM 3:45 | | AM 9:45 | | PM 3:45 | | PM 9:45 | |
| AM 4:00 | | AM 10:00 | | PM 4:00 | | PM 10:00 | |
| AM 4:15 | | AM 10:15 | | PM 4:15 | | PM 10:15 | |
| AM 4:30 | | AM 10:30 | | PM 4:30 | | PM 10:30 | |
| AM 4:45 | | AM 10:45 | | PM 4:45 | | PM 10:45 | |
| AM 5:00 | | AM 11:00 | | PM 5:00 | | PM 11:00 | |
| AM 5:15 | | AM 11:15 | | PM 5:15 | | PM 11:15 | |
| AM 5:30 | | AM 11:30 | | PM 5:30 | | PM 11:30 | |
| AM 5:45 | | AM 11:45 | | PM 5:45 | | PM 11:45 | |

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## ACTIVITY CODES:

PATIENT CARE
1. Office exams and treatments
2. Telephone assessments, with or without Rx
3. Home, industry, or school visits
4. OPD or clinic exams and treatments
5. Emergency room
6. Hospital - on wards or floors (incl. daily rounds)
7. Hospital - in surgery
8. Hospital - OB delivery
9. Extended care (ICF, SNF, Nursing Home)
10. Teaching rounds

OTHER PROFESSIONAL
11. Consultations
12. Supervision of personnel
13. Laboratory and other indirect care
14. Patient education
15. Teaching - other
16. Teaching related: Meetings, specific document research, materials
17. Research
18. Research related: Meetings, fiscal, personnel, specific document analysis
19. Continuing education: National/regional meetings, courses, self-instruction, professional journals
20. Health-related committee activities

ADMINISTRATION
21. Patient related: Charts, billing, insurance forms, lab reports, pharmacy, medical/legal
22. Other: Dictating, salesmen, purchasing, personnel and management

PROFESSIONAL TRAVEL
23. Travel: Enroute to hospital, office, meetings, etc.

OTHER
24. On call (use only if you are on call and one of the other codes in this list is not applicable)
25. Completion of this survey instrument
26. Civic activities, service clubs
27. Personal - not on call

PART II, SECTION A: ACTIVITY OVERVIEW

## A. YOUR MEDICAL EDUCATION AND CURRENT SPECIALTIES

1. Year of birth 19

| | |
|---|---|
| AM | Aerospace Medicine |
| A | Allergy |
| AN | Anesthesiology |
| BE | Broncho-Esophagology |
| CD | Cardiovascular Diseases |
| D | Dermatology |
| DIA | Diabetes |
| EM | Emergency Medicine |
| END | Endocrinology |
| FP | Family Practice |
| GE | Gastroenterology |
| GP | General Practice |
| GPM | General Preventive Medicine |
| GER | Geriatrics |
| GYN | Gynecology |
| HEM | Hematology |
| HYP | Hypnosis |
| ID | Infectious Diseases |
| IM | Internal Medicine |
| LAR | Laryngology |
| ND | Neoplastic Diseases |
| NEP | Nephrology |
| N | Neurology |
| CHN | Neurology, Child |
| NM | Nuclear Medicine |
| NTR | Nutrition |
| OBS | Obstetrics |
| OBG | Obstetrics and Gynecology |
| OM | Occupational Medicine |
| OPH | Ophthalmology |
| OST | Osteopathy |
| OT | Otology |
| OTO | Otorhinolaryngology |
| CLP | Pathology, Clinical |
| FOP | Pathology, Forensic |
| PD | Pediatrics |
| PDA | Pediatric Allergy |
| PDC | Pediatric Cardiology |
| PM | Physical Medicine and Rehabilitation |
| P | Psychiatry |
| CHP | Psychiatry, Child |
| PYA | Psychoanalysis |
| PYM | Psychosomatic Medicine |
| PH | Public Health |
| PUD | Pulmonary Disease |
| R | Radiology |
| PDR | Radiology, Pediatric |
| TR | Radiology, Therapeutic |
| DR | Roentgenology, Diagnostic |
| RHU | Rheumatology |
| RHI | Rhinology |
| ABS | Surgery, Abdominal |
| CDS | Surgery, Cardiovascular |
| GS | Surgery, General |
| HS | Surgery, Hand |
| HNS | Surgery, Head and Neck |
| NS | Surgery, Neurological |
| ORS | Surgery, Orthopedic |
| PDS | Surgery, Pediatric |
| PS | Surgery, Plastic |
| TS | Surgery, Thoracic |
| TRS | Surgery, Traumatic |
| U | Surgery, Urological |

We need the most current information obtainable regarding your education and specialties. Refer to the list of medical and surgical specialties (see left) and select the code(s) which best describes your professional commitments. For example, if "Allergy" applies to you, record "A". *If your specialty is not listed, print it in the space(s) provided for Specialty Code.*

2. Current Specialties

| Specialty | Specialty Code (use code at left) | Percent of Professional Time | Years of Practice in This Specialty |
|---|---|---|---|
| a. Primary | | % | |
| b. Secondary | | % | |
| c. All other | | % | |

Total = 100%

3. Education/Training

a. I received my medical degree from

_____
(name of Medical School)

in 19

b. (In responding to this question, insert the appropriate specialty codes, shown on the left, in the boxes provided below. If none, leave the boxes blank.)

(1) I had at least one full year of residency training in:

(2) I have completed residency training requirements for certification in:

(3) I am board (or sub-board) certified in:

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## G. PERSONNEL AND HOURS WORKED

1. For each type of personnel employed at your principal office, indicate the number of individuals employed and the number of hours per week they spend at that location. For example, if your practice employs one RN who works 40 hours per week and three RNs who work 20 hours per week, then to the right of "RN" you would place a "1" in the column headed "35-40" and a "3" in the column headed "20-24".

| Types of Personnel | Number of Hours Per Week | | | | |
|---|---|---|---|---|---|
| | Under 20 | 20-24 | 25-34 | 35-40 | Over 40 |
| Physician | | | | | |
| MEDEX-type program | | | | | |
| Nurse practitioner (formally trained) | | | | | |
| Physician's assistant (formally trained) | | | | | |
| Assistant trained within your practice | | | | | |
| RN | | | | | |
| Lab or X-ray technician | | | | | |
| Surgical technician | | | | | |
| LPN or LVN | | | | | |
| Community Health Aide | | | | | |
| Secretary/Receptionist | | | | | |
| Other:_____ (Specify) | | | | | |

2. If you do not currently use a formally trained Medex, Nurse Practitioner or Physician's Assistant in your practice, would you do so if such highly trained personnel were available? CHECK ONE:

a. ☐ Yes b. ☐ No

If yes, which type would you prefer in your practice? CHECK ALL THAT WOULD BE SUITABLE:

c. ☐ Medex d. ☐ Nurse Practitioner e. ☐ Physician's Assistant (Associate)

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**PLEASE REVIEW INSTRUCTIONS BEFORE STARTING**

| ENCOUNTER LOCATION | | | |
|---|---|---|---|
| | 1. Office | 5. Emergency Room | 8. Home |
| | 2. OPD | 6. Extended Care (ICF, SNF, Nursing Home) | 9. Other |
| | 3. Clinic | | |
| | 4. Hospital | 7. Industry/School | |

| PRIMARY PROBLEM TYPE | | | |
|---|---|---|---|
| | 1. Preventive | 5. Medical & Surgical | Obstetrical |
| | 2. Medical | 6. Psycho/Social | 8. Antepartum |
| | 3. Surgical - minor | 7. Environmental/ Economic | 9. Intrapartum |
| | 4. Surgical - major | | 10. Postpartum |

Tear off here

Staff may complete this section

Use numbers from Coding Key

| PATIENT ID | ENCOUNTER DATE and TIME | | | PATIENT & ENCOUNTER CHARACTERISTICS | | | | | | | | | PATIENT'S PROBLEM(S) | | | | DIAGNOSTIC PROCEDURES | THERAPEUTIC PROCEDURES | ENCOUNTER CLASS | | STATUS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | Primary | | Other | | | | | | |
| Your Use Only | Line Number | Mo. Day Yr. Date | Time in Minutes | Location (use one of the above codes 1-9) | Estimate to nearest year (0 = under one year) | Age | Sex (1 Male 2 Female) | Seen patient before? (1 Yes 2 No) | Regular patient? (1 Yes 2 No) | Patient Source (1. Self/Patient 2. Agency 3. Physician 4. Consult) | This patient? (1 Yes 2 No 3 Undetermined) Patient's family? (1 Yes 2 No 3 Undetermined) | Majority of Care (1. Provide 2. Assist 3. Undetermined) | Number of visits for this problem? | Type/use one of the above codes (1-10) | Focus / Etiology (Dx) | Focus / Etiology (Dx) | Focus / Etiology (Dx) | | Record all ordered, performed, or interpreted | Record all ordered or performed | Complexity / Severity / Urgency | Your next contact / Referral/Consultation | |
| | 041 | | | | | | | | | | | | | | | | | | | | |
| | | Primary Dx (Print) | | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 042 | | | | | | | | | | | | | | | | | | | | |
| | | Primary Dx (Print) | | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 043 | | | | | | | | | | | | | | | | | | | | |
| | | Primary Dx (Print) | | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 044 | | | | | | | | | | | | | | | | | | | | |
| | | Primary Dx (Print) | | | | | | | | | | | | Other Dx (Print) | | | | | | | |
| | 045 | | | | | | | | | | | | | | | | | | | | |
| | | Primary Dx (Print) | | | | | | | | | | | | Other Dx (Print) | | | | | | | |

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PART II, SECTION C: PATIENT ENCOUNTERS—OUTPATIENT/INPATIENT

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# CODING KEY

## FOCUS

1 Well patient

2 Skin, incl. nails, hair
3 Head/Neck
4 Eyes
5 ENT
6 Respiratory
7 Circulatory
8 Blood/Lymphatics
9 Gastrointestinal
10 Musculoskeletal
11 Neurological
12 Emotional
13 Genitourinary - male

**OBSTETRICAL/GYNECOLOGICAL**

14 Breasts

15 Ovaries
16 Fallopian tubes
17 Uterus
18 Endometrium
19 Cervix
20 Vagina
21 External genitalia
22 Urinary tract

23 Abdomen/Peritoneum
24 Pelvic support
25 Pelvis - other

26 Placenta
27 Fetus
28 Amniotic fluid

29 Endocrine
30 Menstruation

31 Multi-system*

* Use only if one of the above is not more descriptive and correct

## ETIOLOGY (DX)

1 None

2 Health assessment
3 Developmental
4 Pre/Post surgical

5 Iatrogenic
6 Idiopathic (based on workup)

7 Infection/post-infection
8 Inflammation
9 Hemorrhaging/Bleeding
10 Discharge
11 Occlusion
12 Ulceration

13 Immunologic
14 Allergic
15 Metabolic
16 Deficiencies
17 Nutrition, incl. weight

18 Congenital
19 Degeneration
20 Hypertension

21 Neoplasm - benign
22 Neoplasm - malignant
23 Neoplasm - undetermined

24 Intoxication/Addiction
25 Trauma

26 Toxemia
27 Normal labor
28 Abnormal/Premature labor
29 Disproportion
30 Malpresentation
31 Lactation

32 Pelvic relaxation
33 Infertility
34 Sexual dysfunction
35 Menopause

36 Family planning, incl. fertility control
37 Unwanted pregnancy
38 Abortion
39 Sterilization

PSYCHO/SOCIAL
40 General adjustment
41 Depression/Anxiety
42 Neuroses
43 Psychoses
44 Psychosomatic

UNDETERMINED
45 Fatigue
46 Fever
47 Headache
48 Malingering
49 Pain
50 Mass (non-fetal)

## DIAGNOSTIC PROCEDURES

1 None

2 Routine lab - CBC, Urinalysis
3 Pregnancy
4 Hormone
5 Prenatal panel
6 Serology/VD
7 Sickle cell
8 "Panel" - automated (e.g., SMA 12)
9 Blood chemistries - other

10 Pap smear
11 Culture
12 Microscopic exam of specimen
13 Skin test - TB/Mycosis

14 ECG
15 Amniotic fluid analysis
16 Fetal monitoring

17 Biopsy
18 Endometrial lavage
19 Culdocentesis
20 Tubal insufflation
21 Infertility - other
22 Enzymes
23 Glucose tolerance
24 Renal function

ENDOSCOPY
25 Colposcopy
26 Cystoscopy
27 Hysteroscopy
28 Laparoscopy
29 Endoscopy - other

RADIOLOGY
30 Chest
31 GI
32 Fluoroscopy
33 Isotopes
34 Mammography
35 Hysterosalpingography
36 Pelvimetry
37 X-ray - other

OTHER
38 Thermography
39 Sonography

40 Tests - other

## THERAPEUTIC PROCEDURES

1 None

2 Immunizations
3 Injections - other

SURGICAL
4 Cauterization/Cryotherapy
5 Incision/Drainage
6 Suturing only
7 Dilatation/Curettage
8 Aspiration/Centesis
9 Vaginal delivery
10 Cesarean section
11 Organ removal/repair
12 Excision - other
13 Circumcision
14 Foreign body removal
15 Exploratory
16 Catheterization
17 Surgery - other

POST SURGERY/INJURY
18 Dressing: apply/remove
19 Suture/Drain removal

OTHER RX
20 Anesthetization
21 Chemotherapy
22 IUD insertion
23 Radiation therapy
24 Transfusion
25 Rx - other

COUNSELING
26 Growth/Development
27 Family/Social/Sexual
28 Patient education
29 Therapeutic listening
30 Treatment program
31 Contraceptives

PRESCRIPTIONS/ORDERS
32 Drugs - contraceptive
33 Drugs - systemic - other
34 Drugs - topical - other
35 Diaphragm
36 Exercise/Diet
37 Prosthesis/Aids

## ENCOUNTER CLASSIFICATION

**COMPLEXITY**
1. Minimal
2. Brief
3. Limited
4. Extended
5. Comprehensive

**SEVERITY**
1. None
2. Minor - acute
3. Minor - chronic
4. Moderate - acute
5. Moderate - chronic
6. Severe - acute
7. Severe - chronic

**URGENCY**
1. None
2. Could have been deferred
3. Needed to see today
4. Should have seen sooner
5. Emergency

## STATUS/DISPOSITION

**YOUR NEXT CONTACT**
1. None this problem
2. Telephone

OUTPATIENT
3. Return as necessary
4. Visit scheduled
5. House call

INPATIENT
6. At hospital admission
7. On rounds (prior admission)
8. In surgery

OTHER
9. Emergency room
10. Extended care (ICF, SNF, Nursing Home)
11. DOA/Death
12. Other

**REFERRAL/CONSULTATION**
1. None
2. Return to referral source
3. Medical specialist for care
4. Medical specialist for consult
5. Surgical specialist for care
6. Surgical specialist for consult
7. Dentist
8. Physician Extender (e.g., Medex, Nurse Practitioner, Physician's Assistant)
9. Therapist/technician (e.g., Dietary)
10. Public agency
11. Other

P. AMBULATORY SERVICES (TEACHING PATIENTS)

| INSTITUTION | DIRECTOR OF CLINICS/SERVICES | # OF NEW OB. PTS.* | TOTAL OB. VISITS | # OF NEW GYN. PTS. | TOTAL GYN. VISITS | # OF EMERGENCY ROOM PATIENTS SEEN BY OB-GYN RESIDENTS |
|---|---|---|---|---|---|---|
| A. | | | | | | |
| B. | | | | | | |
| C. | | | | | | |
| D. | | | | | | |
| E. | | | | | | |

Q. RELATED SPECIAL CLINICS INCLUDED IN ABOVE TOTALS

| INSTITUTION** | TYPE OF CLINIC/SERVICE | TOTAL OB. VISITS | TOTAL GYN. VISITS, NEW AND RETURN | DIRECTOR CLINIC/SERVICE |
|---|---|---|---|---|
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* EACH PREGNANCY CONSIDERED AS NEW OBSTETRICS PATIENT.

** IDENTIFY BY LETTERS AS LISTED ON PAGES 2-4.

## R. OBSTETRIC AND GYNECOLOGIC DIAGNOSTIC AND THERAPEUTIC TECHNICAL PROCEDURES

Check the type of experience usually achieved by ALL residents who have most recently completed the program. Use only one check mark per line to indicate most common level of education.

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| OBSTETRIC PROCEDURES: | | | |
| Amniocentesis for genetic studies | | | |
| Amniocentesis for fetal monitoring | | | |
| Electronic fetal monitoring in labor | | | |
| Electronic fetal monitoring before labor | | | |
| Fetal scalp sampling | | | |
| General anesthesia | | | |
| Regional anesthesia (spinal, saddle, epidural, caudal) | | | |
| Intubation of newborn | | | |
| Sonography (real time or static) | | | |
| Stress testing | | | |
| MANAGEMENT OF: | | | |
| Pregnant diabetic | | | |
| Premature labor | | | |
| Molar pregnancy | | | |
| Severe pre-eclampsia and eclampsia | | | |
| Isoimmunization | | | |
| Premature rupture of membranes | | | |
| Intrauterine growth retardation | | | |
| Pregnant cardiac | | | |
| High risk newborn | | | |

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| EXTERNAL GENITALIA: | | | |
| Simple vulvectomy | | | |
| Perineorrhaphy | | | |
| Management of large hematoma | | | |
| VAGINA: | | | |
| Construction of new vagina | | | |
| Repair of: | | | |
| vesico-vaginal fistula | | | |
| recto-vaginal fistula | | | |
| enterocoele | | | |
| vaginal prolapse | | | |
| suburethral diverticulum | | | |
| Retropubic urethropexy | | | |
| UTERUS, VAGINAL: | | | |
| Diagnostic D&C | | | |
| Suction curettage | | | |
| Cerv. cautery or cryosurgery | | | |
| Cold knife conization | | | |
| Circlage for incompetent cervix | | | |
| Removal of cervical stump | | | |
| Culdocentesis | | | |
| Posterior colpotomy | | | |
| Brachytherapy | | | |
| Vaginal hysterectomy | | | |
| UTERUS, ABDOMINAL: | | | |
| Cesarean hysterectomy | | | |
| Abdominal hysterectomy | | | |
| Myomectomy | | | |
| Uterine unification | | | |
| Uterine suspension | | | |

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| OVIDUCTS: | | | |
| Hysterosalpingogram | | | |
| Salpingectomy | | | |
| Laparoscopy, operative | | | |
| Laparoscopy, diagnostic | | | |
| Tubal re-implantation | | | |
| Tubal reconstruction | | | |
| OVARY: | | | |
| Wedge resection or biopsy | | | |
| Oophorectomy during 2nd or 3rd trimester | | | |
| Cystectomy | | | |
| OTHER PELVIC STRUCTURES: | | | |
| Exposure of iliac vessels | | | |
| Ligation of hypogastric artery | | | |
| Repair of major vessels | | | |
| Exposure of ureter | | | |
| Ureteral repair | | | |
| Exposure of obturator nerve | | | |
| Sigmoidoscopy | | | |
| Repair of small bowel injury | | | |
| Repair of large bowel injury | | | |
| Colostomy | | | |
| Cystoscopy | | | |
| Repair of bladder injury | | | |
| GYNECOLOGIC ONCOLOGY: | | | |
| Radical vulvectomy | | | |
| Radical hysterectomy | | | |
| Bowel resection & anastomosis | | | |
| Pelvic exenteration | | | |
| Urinary diversion | | | |
| Peri-aortic node excision | | | |

| | PERFORM | OBSERVE | LEARN THE PRINCIPLES OF |
|---|---|---|---|
| OTHER PROCEDURES: | | | |
| Repair abdominal wound dehiscence | | | |
| Hyperalimentation | | | |
| Thoracentesis | | | |
| Paracentesis | | | |
| Cystometrogram | | | |
| Breast biopsy/aspiration | | | |
| Insertion of subclavian line | | | |
| Insertion of arterial line | | | |
| Evacuation of retroperitoneal hematoma | | | |

## 5. RESIDENT EXPERIENCE IN OBSTETRICS

NAME _____ FROM _____ TO _____
First, Last Month/Year Month/Year

Please complete for each resident most recently completing the program with totals in each category for entire resident experience in the program. Categories are defined as follows:

COMPLETE MANAGEMENT:

RESIDENT WORKS UP PATIENT, WRITES ORDER, DISCUSSES CARE WITH ATTENDING PHYSICIAN. RESIDENT PERFORMS 50% OR MORE OF THE SURGICAL PROCEDURE, IF ONE IS PERFORMED, AND CARES FOR THE PATIENT POSTOPERATIVELY UNDER SUPERVISION.

OPERATIVE MANAGEMENT:

RESIDENT HAS LITTLE INVOLVEMENT IN THE PRE AND/OR POST OPERATIVE CARE OF THE PATIENT BUT PERFORMS 50% OR MORE OF THE SURGICAL OPERATION UNDER SUPERVISION.

SURGICAL ASSISTANT:

RESIDENT SERVES AS FIRST ASSISTANT AT SURGERY PERFORMING LESS THAN 50% OF THE SURGICAL PROCEDURE.

| PROCEDURE | COMPLETE MANAGEMENT | OPERATIVE MANAGEMENT | SURGICAL ASSISTANT |
|---|---|---|---|
| Cesarean Section | | | |
| Spontaneous Deliveries | | | |
| Low Forceps Deliveries | | | |
| Mid-Forceps Deliveries | | | |
| Breech Deliveries (Vaginally) | | | |
| Twin Deliveries (Vaginally) | | | |
| Fetal Scalp Blood Sampling | | | |
| Neonatal Intubations for Resuscitation | | | |
| Conduction Anesthesia (e.g. Epidural, Saddle, etc.) | | | |

## 5. RESIDENT EXPERIENCE WITH IN-PATIENT GYNECOLOGY

NAME _____ FROM _____ TO _____
Last, First Month/Year Month/Year

Please complete for each resident most recently completing the program with totals in each category for entire resident experience in the program. Categories are defined as follows:

COMPLETE MANAGEMENT:

RESIDENT WORKS UP PATIENT, WRITES ORDER, DISCUSSES CARE WITH ATTENDING PHYSICIAN. RESIDENT PERFORMS 50% OR MORE OF THE SURGICAL PROCEDURE, IF ONE IS PERFORMED, AND CARES FOR THE PATIENT POSTOPERATIVELY UNDER SUPERVISION.

OPERATIVE MANAGEMENT:

RESIDENT HAS LITTLE INVOLVEMENT IN THE PRE AND/OR POST OPERATIVE CARE OF THE PATIENT BUT PERFORMS 50% OR MORE OF THE SURGICAL OPERATIONS UNDER SUPERVISION.

SURGICAL ASSISTANT:

RESIDENT SERVES AS FIRST ASSISTANT AT SURGERY PERFORMING LESS THAN 50% OF THE SURGICAL PROCEDURE.

| PROCEDURE | COMPLETE MANAGEMENT | OPERATIVE MANAGEMENT | SURGICAL ASSISTANT |
|---|---|---|---|
| Abdominal Hysterectomy (with or without removal of adnexa) | | | |
| Vaginal Hysterectomy | | | |
| Vaginal Hysterectomy with Vaginal Repair | | | |
| Other Major Vaginal Surgery | | | |
| Vulvectomy (Simple & Radical) | | | |
| Laparoscopy (Diagnostic & Operative) | | | |
| Application of Brachytherapy Devices | | | |
| Retropubic Urethropexy | | | |
| Tubal Reanastamosis and Re-Implantation | | | |
| Repair of Dehiscence | | | |

## T. SENIOR RESIDENT CASE LIST OF OBSTETRIC PATIENTS

### (OTHER THAN NORMAL SPONTANEOUS, OUTLET FORCEPS OR UNCOMPLICATED DELIVERIES)

SENIOR RESIDENT'S NAME _____ FROM _____ TO _____
Last, First Month/Year Month/Year

List to be compiled by the resident during the last year of residency with patients managed solely by the senior resident under supervision or in concert with an attending physician when the senior resident played a major role in the management.

| INITIALS OR HOSP.# | AGE | GRAVIDA / PARA | MATERNAL-FETAL COMPLICATIONS | | OPERATIVE PROCEDURES AND/OR TREATMENT | DAYS IN HOSP. | COMPLI-CATIONS | WGT | APGARS 1 MIN/5MIN | DAYS IN HOSP. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | PREGNANCY & LABOR | DELIVERY & PUERPERIUM | | | | | | |
| | | | | | | | | | | |
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T. SENIOR RESIDENT CASE LIST OF MAJOR GYNECOLOGIC INPATIENT SURGICAL PROCEDURES (EXCEPT LAPAROSCOPIES)

SENIOR RESIDENT'S NAME _____ FROM _____ TO _____
Last, First Month/Year Month/Year

List to be compiled by the resident during the last year of residency with patients managed solely by the senior resident under supervision or in concert with an attending physician when the senior resident played a major role in the management.

| INITIALS OR HOSP. NO. | AGE | PARA | DIAGNOSIS PREOPERATIVE OR ADMISSION | TREATMENT | HISTOPATHOLOGIC DIAGNOSIS | COMPLICATIONS | DAYS IN HOSP. |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
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# STATUS OF GRADUATE TRAINING PROGRAMS

In: _____
(Name of hospital, city and state)

Please supply information on the residency programs carried on in your hospital, for the information of the Review Committee(s) that will evaluate the survey(s) being carried on at this time. Copies should be prepared to accompany the report of the member of the Field Staff on each program being reviewed at this time. All copies should be identical, as they should reflect the status of all graduate programs currently carried on in the hospital.

| GRADUATE TRAINING PROGRAM | PRESENT STATUS OF ALL GRADUATE PROGRAMS<br>Place an X in the proper column. | | HOUSE STAFF (RESIDENT) POSITIONS | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Number Filled | | | |
| | Approved Program | Application or Re-application | Number Offered (total) | Foreign Graduates | Other Graduates | Total Filled | Positions Vacant |
| Initial Year of Grad. Educ. (Flexible Year) | | | | | | | |
| Allergy and Immunology | | | | | | | |
| Anesthesiology | | | | | | | |
| Colon and Rectal Surgery | | | | | | | |
| Dermatology | | | | | | | |
| Dermatopathology | | | | | | | |
| Family Practice | | | | | | | |
| Internal Medicine | | | | | | | |
| Neurological Surgery | | | | | | | |
| Neurology | | | | | | | |
| Nuclear Medicine | | | | | | | |
| Obstetrics-Gynecology | | | | | | | |
| Ophthalmology | | | | | | | |
| Orthopaedic Surgery | | | | | | | |
| Otolaryngology | | | | | | | |
| Pathology - Anat. Clin. | | | | | | | |
| Pathology - Forensic | | | | | | | |
| Pathology - Neuropathology | | | | | | | |
| Pathology - Blood Banking | | | | | | | |
| Pediatrics | | | | | | | |
| Pediatric Cardiology | | | | | | | |
| Physical Medicine and Rehab. | | | | | | | |
| Plastic Surgery | | | | | | | |
| Psychiatry | | | | | | | |
| Psychiatry - Child Psychiatry | | | | | | | |
| Radiology w/ Special Competence in Nuclear Radiology | | | | | | | |
| Radiology - Diagnostic | | | | | | | |
| Radiology - Therapeutic | | | | | | | |
| Surgery | | | | | | | |
| Thoracic Surgery | | | | | | | |
| Urology | | | | | | | |
| Preventitive Medicine - General | | | | | | | |
| Prev. Med. - Aerospace Med. | | | | | | | |
| Prev. Med. - Occupational Med. | | | | | | | |
| Prev. Med. - Public Health | | | | | | | |
| TOTAL POSITIONS: | | | | | | | |

APPENDIX D-3

GMENAC DATA FOR OBSTETRICS/GYNECOLOGY

TAKEN FROM TABLES 18, 19, 20, & 21 OGME, PHYSICIAN REQUIREMENTS - 1990 FOR OBSTETRICS/GYNECOLOGY

| OBS | ID | VISITS, NCS[1] | TIME, NCS | VISITS, CS[2] | TIME, CS | SUM VISITS, CS | SUM TIME, CS | % VISITS, NCS | % TIME, NCS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LEB OVRY | 81015 | 142030 | 72913 | 153903 | 98963355 | 29793415 | 0.000819 | 0.005438 |
| 2 | OOPHORECTOMY/SALPINGECTOMY | 511907 | 1023813 | 144370 | 678250 | 98963355 | 29793415 | 0.005173 | 0.034364 |
| 3 | SALPINGECTOMY | 190035 | 247045 | 19003 | 135900 | 98963355 | 29793415 | 0.001920 | 0.008292 |
| 4 | TUBUAL LIGATION | 1257231 | 1257231 | 1077447 | 1192344 | 98963355 | 29793415 | 0.012704 | 0.042178 |
| 5 | EXAB OTH | 169904 | 84953 | 33981 | 51009 | 98963355 | 29793415 | 0.001717 | 0.002851 |
| 6 | COLPOR | 43883 | 48271 | 17553 | 33756 | 98963355 | 29793415 | 0.000443 | 0.001620 |
| 7 | PLASTIC REP | 165405 | 248108 | 33081 | 148902 | 98963355 | 29793415 | 0.001671 | 0.008328 |
| 8 | HYSTERECTOMY | 473900 | 1042579 | 450205 | 1014562 | 98963355 | 29793415 | 0.004789 | 0.034994 |
| 9 | D&C | 428241 | 502592 | 365417 | 477213 | 98963355 | 29793415 | 0.006348 | 0.016869 |
| 10 | CONIZATION | 99018 | 79215 | 89114 | 75244 | 98963355 | 29793415 | 0.001001 | 0.002659 |
| 11 | OTHER GYNECOLOGY | 631241 | 820613 | 568117 | 790895 | 98963355 | 29793415 | 0.006379 | 0.027543 |
| 12 | MICRO | 7876 | 25992 | 7483 | 25380 | 98963355 | 29793415 | 0.000080 | 0.000872 |
| 13 | TERMINATED PREGNANCY | 195036 | 156029 | 195036 | 156029 | 98963355 | 29793415 | 0.001971 | 0.005237 |
| 14 | D&C POST DEL | 249421 | 124710 | 249421 | 124648 | 98963355 | 29793415 | 0.002520 | 0.004184 |
| 15 | REP LAC | 214727 | 107364 | 5368 | 55016 | 98963355 | 29793415 | 0.002170 | 0.003604 |
| 16 | OTHER OB | 76889 | 84578 | 3844 | 44383 | 98963355 | 29793415 | 0.000777 | 0.002839 |
| 17 | C SECTION | 592812 | 889219 | 845387 | 889219 | 98963355 | 29793415 | 0.005990 | 0.029846 |
| 18 | DELIVERY | 1917140 | 5751421 | 1917140 | 5751421 | 98963355 | 29793415 | 0.019372 | 0.193043 |
| 19 | HOSP PRE/POST OP | 14215733 | 4725728 | 14215733 | 4725728 | 98963355 | 29793415 | 0.143654 | 0.158617 |
| 20 | OUT PATIENT PRE/POST OP | 9148558 | 1354420 | 7035044 | 1043400 | 98963355 | 29793415 | 0.092414 | 0.035028 |
| 21 | PRE/POST PARTUM | 30878500 | 5827072 | 30878500 | 5827072 | 98963355 | 29793415 | 0.312020 | 0.195583 |
| 22 | HOSP NON SURGICAL | 4471752 | 1303194 | 4471752 | 1303194 | 98963355 | 29793415 | 0.045186 | 0.043741 |
| 23 | AMB054 | 477482 | 70818 | 367294 | 54475 | 98963355 | 29793415 | 0.004825 | 0.002377 |
| 24 | AMBC01 | 29571 | 4384 | 22747 | 3374 | 98963355 | 29793415 | 0.000299 | 0.000147 |
| 25 | AMB098 | 436529 | 64744 | 335792 | 49803 | 98963355 | 29793415 | 0.004411 | 0.002173 |
| 26 | AMB099 | 553524 | 82094 | 425789 | 63151 | 98963355 | 29793415 | 0.005593 | 0.002756 |
| 27 | AMB112 | 479978 | 100851 | 523060 | 77577 | 98963355 | 29793415 | 0.004851 | 0.003385 |
| 28 | AMBR13 | 1312238 | 194624 | 1009414 | 149711 | 98963355 | 29793415 | 0.013260 | 0.006532 |
| 29 | AMB258 | 2354 | 349 | 1811 | 269 | 98963355 | 29793415 | 0.000024 | 0.000012 |
| 30 | AMBC02 | 1511303 | 224148 | 1162541 | 172422 | 98963355 | 29793415 | 0.015271 | 0.007523 |
| 31 | AMBR21 | 266785 | 39568 | 205219 | 30437 | 98963355 | 29793415 | 0.002696 | 0.001328 |
| 32 | AMB277 | 44403 | 6584 | 34156 | 5066 | 98963355 | 29793415 | 0.000449 | 0.000221 |
| 33 | AMB401 | 363362 | 53892 | 279509 | 41455 | 98963355 | 29793415 | 0.003672 | 0.001809 |
| 34 | AMB460 | 9074 | 1346 | 6981 | 1035 | 98963355 | 29793415 | 0.000092 | 0.000045 |
| 35 | AMB595 | 957882 | 142068 | 736832 | 109283 | 98963355 | 29793415 | 0.009679 | 0.004768 |
| 36 | AMBC12 | 4005444 | 594066 | 3081110 | 456974 | 98963355 | 29793415 | 0.040474 | 0.019939 |
| 37 | AMBR57 | 1313115 | 194754 | 1010089 | 149811 | 98963355 | 29793415 | 0.013269 | 0.006537 |
| 38 | AMB414 | 631991 | 93734 | 486147 | 72103 | 98963355 | 29793415 | 0.006384 | 0.003146 |
| 39 | AMBH08 | 4302849 | 638175 | 3309884 | 490904 | 98963355 | 29793415 | 0.043479 | 0.021420 |
| 40 | AMB620-621 | 690958 | 102479 | 531506 | 78830 | 98963355 | 29793415 | 0.006982 | 0.003440 |
| 41 | AMB622 | 1089274 | 161554 | 837905 | 124273 | 98963355 | 29793415 | 0.011007 | 0.005423 |
| 42 | AMBC14 | 1283396 | 190346 | 987228 | 146420 | 98963355 | 29793415 | 0.012968 | 0.006389 |
| 43 | AMB626 | 4122863 | 611481 | 3171433 | 470370 | 98963355 | 29793415 | 0.041661 | 0.020524 |
| 44 | AMB627 | 709679 | 105254 | 545907 | 80966 | 98963355 | 29793415 | 0.007171 | 0.003533 |
| 45 | AMB628 | 1208001 | 179164 | 929231 | 137819 | 98963355 | 29793415 | 0.012207 | 0.004614 |
| 46 | AMB629 | 1993807 | 295711 | 1533697 | 227470 | 98963355 | 29793415 | 0.020147 | 0.009925 |
| 47 | AMBR61 | 2824518 | 419214 | 2174245 | 322472 | 98963355 | 29793415 | 0.028541 | 0.014071 |
| 48 | AMBR63 | 233020 | 34560 | 179246 | 26585 | 98963355 | 29793415 | 0.002355 | 0.001160 |
| 49 | AMB785 | 101325 | 15028 | 77942 | 11560 | 98963355 | 29793415 | 0.001024 | 0.000504 |
| 50 | AMBC07 | 148481 | 22022 | 114214 | 16940 | 98963355 | 29793415 | 0.001500 | 0.000739 |
| 51 | AMB793 | 15765 | 2338 | 12127 | 1799 | 98963355 | 29793415 | 0.000159 | 0.000078 |
| 52 | WELLCARE | 9119278 | 1352522 | 7014830 | 1040402 | 98963355 | 29793415 | 0.092148 | 0.045397 |
| 53 | FAMILY PRACTICE | 3762699 | 558043 | 2894384 | 429279 | 98963355 | 29793415 | 0.038021 | 0.018731 |
| 54 | COUNSELING | 446118 | 66166 | 343168 | 50897 | 98963355 | 29793415 | 0.004508 | 0.002221 |

1. NCS = Not Corrected for Simultaneity
2. CS = Corrected for Simultaneity


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## NONPHYSICIANS AVAILABLE FOR OB-GYN IN 1990

| Type | Total Supply | Active Supply | Capability |
|---|---|---|---|
| Nurse-midwife | 4,000-5,000 1/ | 2,800 2/ | 197,600 deliveries and the related 2.8 million prenatal/ postpartum visits; 2.8 million additional visits 3/ |
| Ob-gyn nurse practitioners 4/ | 3,900 5/ | 2,900 6/ | 7.8 million visits 7/ |
| Physician's assistants | 500 8/ | 400 9/ | 1.2 million visits 10/ |

Total Capability: 197,600 deliveries and 2.8 million related visits; 11.8 million additional visits

Notes

1/ Estimate from the American College of Nurse-Midwives (ACNM), personal communication, 1980; reflects 175-200 midwives currently graduated each year plus a slight increase.

2/ Based on the low end of the supply projection (4,000) in order to reflect no increase in the numbers graduated each year and 70 percent active in clinical practice. The estimate assumes the percent active in clinical practice will increase. As of 1976-77 it was 51 percent (ACNM survey data).

3/ Assumes that a midwife will manage 70 deliveries and 2,000 ambulatory visits per year. The average midwife who managed deliveries handled 65 in 1976-77 (ACNM survey data). It is assumed nurse-midwives will be given more opportunities to manage deliveries.

4/ Includes maternity, women's health, family planning and all other NPs specializing in the reproductive health care of women.

5/ Ob-gyn NPs are estimated at 10 percent of the total expected NP supply of 39,000 as of 1990.

6/ Assumes 75 percent are active.

7/ Productivity is estimated at 2,700 ambulatory visits per year; this is the equivalent of approximately 11 visits per day. It is at the higher end of the range of estimated productivity in the Bureau of Community Health Service's Standards for nonphysician providers in family planning.

8/ Based on a supply of 26,000 with 2 percent in obstetrics-gynecology.

9/ Assumes 80 percent are active.

10/ Productivity is estimated at 3,000 visits per year.

Taken from Table 5 (p. 29) GMENAC Report, Volume VI, Nonphysician Health Care Provider Technical Panel

TOTAL AMBULATORY REQUIREMENTS TO

OB/GYN TEAM FOR 1990

| GMENAC Diagnosis Code | Total Visits Before Readjustments for Delegation | # of Encounters Per Total Population | Total Time (Total Hours in 1990) | # of Unique Encounters | Time Corrected for Simultamaity |
|---|---|---|---|---|---|
| 054 | 385003 | 477482 | 70818 | 367294 | 54475 |
| C01 | 23844 | 29571 | 4386 | 22747 | 3374 |
| 098 | 351982 | 436529 | 64744 | 335792 | 49803 |
| 099 | 446319 | 553526 | 82096 | 425789 | 63151 |
| 112 | 548280 | 679978 | 100851 | 523060 | 77577 |
| R13 | 1058084 | 1312238 | 194624 | 1009414 | 149711 |
| 258 | 1900 | 2356 | 349 | 1813 | 269 |
| C02 | ,218594 | 1511303 | 224148 | 1162541 | 172422 |
| R21 | 215114 | 266785 | 39568 | 205219 | 30437 |
| 277 | 35803 | 44403 | 6586 | 34156 | 5066 |
| 401 | 292986 | 363362 | 53892 | 279509 | 41455 |
| 460 | 7318 | 9076 | 1346 | 6981 | 1035 |
| 595 | 772359 | 957882 | 142068 | 736832 | 109283 |
| C12 | 3229669 | 4005444 | 594066 | 3081110 | 456974 |
| R57 | 1058791 | 1313115 | 194754 | 1010089 | 149811 |
| 616 | 509587 | 631991 | 93734 | 486147 | 72103 |
| NOS | 3469473 | 4302849 | 638175 | 3309884 | 490904 |
| 620-621 | 557133 | 690958 | 102479 | 531506 | 78830 |
| 622 | 878305 | 1089276 | 161556 | 837905 | 124273 |
| C14 | 1034828 | 1283396 | 190346 | 987228 | 146420 |
| 626 | 3324347 | 4122863 | 611481 | 3171433 | 470370 |
| 627 | 572228 | 709679 | 105256 | 545907 | 80966 |
| 628 | 974035 | 1208001 | 179164 | 929231 | 137819 |
| 629 | 1607646 | 1993807 | 295771 | 1533697 | 227470 |
| R61 | 2279078 | 2826518 | 419214 | 2174245 | 322472 |
| R63 | 187889 | 233020 | 34560 | 179246 | 26585 |
| 785 | 81700 | 101325 | 15028 | 77942 | 11560 |
| C17 | 119723 | 148481 | 22022 | 114216 | 16940 |
| 793 | 12712 | 15765 | 2338 | 12127 | 1799 |
| Well Care | 7353056 | 9119278 | 1352522 | 7014830 | 1040402 |
| Family Planning | 3033939 | 3762699 | 558063 | 2894384 | 429279 |
| Sex/Rape Counseling | 359714 | 446118 | 66166 | 343168 | 50897 |
| Sum | 36001439 | 44649075 | 6622110 | 34345442 | 5093932 |

# APPENDIX E

## LIST OF ICDA-8 CODES

## SUPPLEMENTARY CLASSIFICATIONS (Y00–Y30)

Categories Y00–Y29 are intended for the classification of admissions to hospitals and visits to out-patient departments, clinics, general practitioners, etc., which cannot be assigned to the main code either because no classifiable diagnosis is reported or because the persons are not sick. Category Y30 is intended for recording all fetal deaths occurring in hospitals so that a total count of births in the hospital may be obtained.

## SPECIAL CONDITIONS AND EXAMINATIONS WITHOUT SICKNESS (Y00–Y13)

***Y00 Medical or special examination**

*Excludes: cases which present some symptoms or evidence of an abnormal condition which requires further study, but which after examination and observation show no need for further treatment or medical care (795)*

**Y00.0 General medical examination**

General medical examination:
- insurance
- routine
- school
- survey

*Excludes: clinical research investigation (Y00.8)*

**Y00.1 General psychiatric examination**

**Y00.2 Radiological examination**

**Y00.3 Laboratory examination**

**Y00.4 Pregnancy examination, pregnancy unconfirmed**

**Y00.5 Well baby and child care**

**Y00.6 Eye examination**

**Y00.7 False positive serology**

**Y00.8 Clinical research investigation (normal control patient)**

**Y00.9 Other and unspecified**

***Y01 Skin immunity and sensitization tests**

Investigation of allergens
Tuberculin test

***Y02 Persons receiving prophylactic inoculation and vaccination**

*Y03 Follow-up examination with no need for further care or need for only limited care

Y03.0 Of inactive pulmonary tuberculosis, after treatment
Prophylactic chemotherapy following pulmonary tuberculosis, after treatment
Status following surgical collapse of lung

Y03.1 Of inactive pulmonary tuberculosis, not known to have been active
Follow-up examination of pulmonary tuberculosis without treatment

Y03.2 Of other cases of inactive tuberculosis
Follow-up examination of inactive tuberculosis of other sites

Y03.3 Of cases of neoplasm after treatment

Y03.4 Follow-up psychiatric examination not needing further psychiatric care

Y03.9 Of other disease, injury, or operation

*Y04 Contacts with infective and parasitic diseases

Y04.0 Tuberculosis

Y04.1 Poliomyelitis

Y04.2 Rabies

Y04.9 Other infective and parasitic diseases

*Y05 Carrier or suspected carrier of infective organism

Y05.0 Diphtheria carrier

Y05.1 Typhoid carrier

Y05.2 Suspected venereal disease carrier

Y05.3 Amoebic dysentery carrier

Y05.9 Carriers or suspected carriers of other infective organisms

*Y06 Prenatal care
Normal pregnancy
*Excludes: complications of pregnancy (630–639)*

*Y07 Postpartum observation

*Y08 Healthy person accompanying sick relative

*Y09 Other person without complaint or illness

Y09.0 For sterilization

Y09.9 Other and unspecified
Healthy donors

*Y10 Medical and surgical aftercare

Y10.0 Adjustment of pace-setter or other cardiac device

Y10.1 Permanent dialysis

Y10.2 Colostomy status

Y10.3 Radiation and chemotherapy aftercare

Y10.4 Orthopedic aftercare, excluding that for complications

Y10.5 Other surgical aftercare

Y10.6 Other medical aftercare

Y10.9 Other and unspecified

*Y11 Plastic surgical treatment

Y11.0 Cosmetic procedure for prominent nose

Y11.1 Cosmetic procedure for prominent ear

Y11.9 Other cosmetic procedure

*Y12 **Fitting of prosthetic device**

Y12.0 **Fitting of artificial arm(s)**

Y12.1 **Fitting of artificial leg(s)**

Y12.2 **Fitting of artificial eye(s)**

Y12.3 **Fitting of dental prosthetic device**

Y12.4 **Fitting of colostomy belt and other abdominal appliance**

Y12.9 **Fitting of other prosthetic device**

*Y13 **Social maladjustment without manifest psychiatric disorder**

## CLASSIFICATION OF LIVEBORN INFANTS ACCORDING TO TYPE OF BIRTH (Y20–Y29)

Includes: only infants born in hospital

*Excludes: premature infants admitted after birth (777)*

.0 **Spontaneous delivery**
.1 **Low forceps delivery**
.2 **Mid or high forceps delivery**
.3 **Cesarean section**
.9 **Other**

Includes: breech extraction (with or without forceps)

*Y20 **Single born, without mention of immaturity**

*Y21 **Single born, immature**

*Y22 **Twin, without mention of immaturity, mate liveborn**

*Y23 **Twin, without mention of immaturity, mate not liveborn**

*Y24 **Twin, immature, with mate liveborn**

*Y25 **Twin, immature, with mate not liveborn**

*Y26 **Multiple born, without mention of immaturity, mates all liveborn**

## SUPPLEMENTARY CLASSIFICATIONS

*Y27 Multiple born, without mention of immaturity, one or more mates not liveborn

*Y28 Multiple born, immature, mates all liveborn

*Y29 Multiple born, immature, one or more mates not liveborn

## FETAL DEATH (Y30)

*Y30 Fetal Death

Y30.0 Early
Gestation less than 20 weeks

Y30.1 Intermediate
Gestation 20–27 weeks

Y30.2 Late
Gestation 28 weeks or more
Stillbirth NOS

LIST OF THREE-DIGIT CATEGORIES

(DETAILED LIST)

## I. INFECTIVE AND PARASITIC DISEASES (000-136)

### Intestinal Infectious Diseases (000–009)

000 Cholera
001 Typhoid fever
002 Paratyphoid fever
003 Other Salmonella infections
004 Bacillary dysentery
005 Food poisoning (bacterial)
006 Amebiasis
007 Other protozoal intestinal diseases
008 Enteritis due to other specified organism
009 Diarrheal disease

### Tuberculosis (010–019)

010 Silicotuberculosis
011 Pulmonary tuberculosis
012 Other respiratory tuberculosis
013 Tuberculosis of meninges and central nervous system
014 Tuberculosis of intestines, peritoneum, and mesenteric glands
015 Tuberculosis of bones and joints
016 Tuberculosis of genitourinary system
017 Tuberculosis of other organs
018 Disseminated tuberculosis
019 Late effects of tuberculosis

**Zoonotic bacterial diseases (020–027)**

020 Plague
021 Tularemia
022 Anthrax
023 Brucellosis
024 Glanders
025 Melioidosis
026 Rat-bite fever
027 Other zoonotic bacterial diseases

**Other bacterial diseases (030–039)**

030 Leprosy
031 Other diseases due to mycobacteria
032 Diphtheria
033 Whooping cough
034 Streptococcal sore throat and scarlet fever
035 Erysipelas
036 Meningococcal infection
037 Tetanus
038 Septicaemia
039 Other bacterial diseases

**Poliomyelitis and other enterovirus diseases of central nervous system (040–046)**

040 Acute paralytic poliomyelitis specified as bulbar
041 Acute poliomyelitis with other paralysis
042 Acute nonparalytic poliomyelitis
043 Acute poliomyelitis, unspecified
044 Late effects of acute poliomyelitis
045 Aseptic meningitis due to enterovirus
046 Other enterovirus diseases of central nervous system

**Viral diseases accompanied by exanthem (050–057)**

050 Smallpox
051 Cowpox
052 Chickenpox
053 Herpes zoster
054 Herpes simplex
055 Measles
056 Rubella
057 Other viral exanthem

**Arthropod-borne viral diseases (060–068)**

060 Yellow fever
061 Dengue
062 Mosquito-borne viral encephalitis
063 Tick-borne viral encephalitis
064 Viral encephalitis transmitted by other arthropods
065 Viral encephalitis, unspecified
066 Late effects of viral encephalitis
067 Arthropod-borne hemorrhagic fever
068 Other arthropod-borne viral diseases

**Other viral diseases (070–079)**

070 Infectious hepatitis
071 Rabies
072 Mumps
073 Psittacosis
074 Specific diseases due to Coxsackie virus
075 Infectious mononucleosis
076 Trachoma, active
077 Late effects of trachoma
078 Other viral diseases of the conjunctiva
079 Other viral diseases

**Rickettsioses and other arthropod-borne diseases (080–089)**

080 Epidemic louse-borne typhus
081 Other typhus
082 Tick-borne rickettsioses
083 Other rickettsioses
084 Malaria
085 Leishmaniasis
086 American trypanosomiasis
087 Other trypanosomiasis
088 Relapsing fever
089 Other arthropod-borne diseases

**Syphilis and other venereal diseases (090–099)**

090 Congenital syphilis
091 Early syphilis, symptomatic
092 Early syphilis, latent
093 Cardiovascular syphilis
094 Syphilis of central nervous system
095 Other forms of late syphilis, with symptoms
096 Late syphilis, latent
097 Other syphilis and not specified
098 Gonococcal infections
099 Other venereal disease

**Other spirochetal diseases (100–104)**

100 Leptospirosis
101 Vincent's angina
102 Yaws
103 Pinta
104 Other spirochetal infection

**Mycoses (110–117)**

110 Dermatophytosis
111 Dermatomycosis, other and unspecified
112 Moniliasis
113 Actinomycosis
114 Coccidioidomycosis
115 Histoplasmosis
116 Blastomycosis
117 Other systemic mycosis

**Helminthiases (120–129)**

120 Schistosomiasis
121 Other trematode infestation
122 Hydatidosis
123 Other cestode infestation
124 Trichiniasis
125 Filarial infestation
126 Ancylostomiasis
127 Other intestinal helminthiasis
128 Other and unspecified helminthiasis
129 Intestinal parasitism, unspecified

**Other infective and parasitic diseases (130–136)**

130 Toxoplasmosis
131 Trichomoniasis urogenitalis
132 Pediculosis
133 Acariasis
134 Other infestation
135 Sarcoidosis
136 Other and unspecified infective and parasitic diseases

## II. NEOPLASMS (140-239)

### Malignant neoplasm of buccal cavity and pharynx (140–149)

140 Malignant neoplasm of lip
141 Malignant neoplasm of tongue
142 Malignant neoplasm of salivary gland
143 Malignant neoplasm of gum
144 Malignant neoplasm of floor of mouth
145 Malignant neoplasm of other and unspecified parts of mouth
146 Malignant neoplasm of oropharynx
147 Malignant neoplasm of nasopharynx
148 Malignant neoplasm of hypopharynx
149 Malignant neoplasm of pharynx, unspecified

### Malignant neoplasm of digestive organs and peritoneum (150–159)

150 Malignant neoplasm of esophagus
151 Malignant neoplasm of stomach
152 Malignant neoplasm of small intestine, including duodenum
153 Malignant neoplasm of large intestine, except rectum
154 Malignant neoplasm of rectum and rectosigmoid junction
155 Malignant neoplasm of liver and intrahepatic bile ducts, specified as primary
156 Malignant neoplasm of gallbladder and bile ducts
157 Malignant neoplasm of pancreas
158 Malignant neoplasm of peritoneum and retroperitoneal tissue
159 Malignant neoplasm of unspecified digestive organs

**Malignant neoplasm of respiratory system (160–163)**

160 Malignant neoplasm of nose, nasal cavities, middle ear, and accessory sinuses
161 Malignant neoplasm of larynx
162 Malignant neoplasm of trachea, bronchus, and lung
163 Malignant neoplasm of other and unspecified respiratory organs

**Malignant neoplasm of bone, connective tissue, skin, and breast (170–174)**

170 Malignant neoplasm of bone
171 Malignant neoplasm of connective and other soft tissue
172 Malignant melanoma of skin
173 Other malignant neoplasm of skin
174 Malignant neoplasm of breast

**Malignant neoplasm of genitourinary organs (180–189)**

180 Malignant neoplasm of cervix uteri
181 Chorionepithelioma
182 Other malignant neoplasm of uterus
183 Malignant neoplasm of ovary, fallopian tube, and broad ligament
184 Malignant neoplasm of other and unspecified female genital organs
185 Malignant neoplasm of prostate
186 Malignant neoplasm of testis
187 Malignant neoplasm of other and unspecified male genital organs
188 Malignant neoplasm of bladder
189 Malignant neoplasm of other and unspecified urinary organs

**Malignant neoplasms of other and unspecified sites (190–199)**

190 Malignant neoplasm of eye
191 Malignant neoplasm of brain
192 Malignant neoplasm of other parts of nervous system
193 Malignant neoplasm of thyroid gland
194 Malignant neoplasm of other endocrine glands
195 Malignant neoplasm of ill-defined sites
196 Secondary and unspecified malignant neoplasm of lymph nodes
197 Secondary malignant neoplasm of respiratory and digestive systems
198 Other secondary malignant neoplasm
199 Malignant neoplasm without specification of site

**Neoplasms of lymphatic and hematopoietic tissue (200–209)**

200 Lymphosarcoma and reticulum-cell sarcoma
201 Hodgkin's disease
202 Other neoplasms of lymphoid tissue
203 Multiple myeloma
204 Lymphatic leukemia
205 Myeloid leukemia
206 Monocytic leukemia
207 Other and unspecified leukemia
208 Polycythemia vera
209 Myelofibrosis

**Benign neoplasms (210–228)**

210 Benign neoplasm of buccal cavity and pharynx
211 Benign neoplasm of other parts of digestive system
212 Benign neoplasm of respiratory system
213 Benign neoplasm of bone and cartilage
214 Lipoma
215 Other benign neoplasm of muscular and connective tissue

216 Benign neoplasm of skin
217 Benign neoplasm of breast
218 Uterine fibroma
219 Other benign neoplasm of uterus
220 Benign neoplasm of ovary
221 Benign neoplasm of other female genital organs
222 Benign neoplasm of male genital organs
223 Benign neoplasm of kidney and other urinary organs
224 Benign neoplasm of eye
225 Benign neoplasm of brain and other parts of nervous system
226 Benign neoplasm of endocrine glands
227 Hemangioma and lymphangioma
228 Benign neoplasm of other and unspecified organs and tissues

Neoplasms of unspecified nature (230–239)

230 Neoplasm of unspecified nature of digestive organs
231 Neoplasm of unspecified nature of respiratory organs
232 Neoplasm of unspecified nature of skin and musculoskeletal system
233 Neoplasm of unspecified nature of breast
234 Neoplasm of unspecified nature of uterus
235 Neoplasm of unspecified nature of ovary
236 Neoplasm of unspecified nature of other female genital organs
237 Neoplasm of unspecified nature of other genitourinary organs
238 Neoplasm of unspecified nature of eye, brain, and other parts of nervous system
239 Neoplasm of unspecified nature of other and unspecified organs

## III. ENDOCRINE, NUTRITIONAL, AND METABOLIC DISEASES (240–279)

### Diseases of thyroid gland (240–246)

240 Simple goiter
241 Nontoxic nodular goiter
242 Thyrotoxicosis with or without goiter
243 Cretinism of congenital origin
244 Myxedema
245 Thyroiditis
246 Other diseases of thyroid gland

### Diseases of other endocrine glands (250–258)

250 Diabetes mellitus
251 Disorders of pancreatic internal secretion other than diabetes mellitus
252 Diseases of parathyroid gland
253 Diseases of pituitary gland
254 Diseases of thymus gland
255 Diseases of adrenal glands
256 Ovarian dysfunction
257 Testicular dysfunction
258 Polyglandular dysfunction and other diseases of endocrine glands

### Avitaminoses and other nutritional deficiency (260–269)

260 Vitamin A deficiency
261 Thiamine deficiency
262 Niacin deficiency
263 Other vitamin B deficiency
264 Ascorbic acid deficiency
265 Vitamin D deficiency
266 Other vitamin deficiency states
267 Protein malnutrition
268 Nutritional marasmus
269 Other nutritional deficiency

Other metabolic diseases (270–279)

270 Congenital disorders of amino-acid metabolism
271 Congenital disorders of carbohydrate metabolism
272 Congenital disorders of lipid metabolism
273 Other and unspecified congenital disorders of metabolism
274 Gout
275 Plasma protein abnormalities
276 Amyloidosis
277 Obesity not specified as of endocrine origin
278 Other hyperalimentation
279 Other and unspecified metabolic diseases

## IV. DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS (280–289)

280 Iron deficiency anemias
281 Other deficiency anemias
282 Hereditary hemolytic anemias
283 Acquired hemolytic anemias
284 Aplastic anemia
285 Other and unspecified anemias
286 Coagulation defects
287 Purpura and other hemorrhagic conditions
288 Agranulocytosis
289 Other diseases of blood and blood-forming organs

## V. MENTAL DISORDERS (290–315)

Psychoses (290–299)

290 Senile and presenile dementia
291 Alcoholic psychosis
292 Psychosis associated with intracranial infection

293 Psychosis associated with other cerebral condition
294 Psychosis associated with other physical conditions
295 Schizophrenia
296 Affective psychoses
297 Paranoid states
298 Other psychoses
299 Unspecified psychosis

Neuroses, personality disorders, and other nonpsychotic mental disorders (300–309)

300 Neuroses
301 Personality disorders
302 Sexual deviation
303 Alcoholism
304 Drug dependence
305 Physical disorders of presumably psychogenic origin
306 Special symptoms not elsewhere classified
307 Transient situational disturbances
308 Behavior disorders of childhood
309 Mental disorders not specified as psychotic associated with physical conditions

Mental retardation (310–315)

310 Borderline mental retardation
311 Mild mental retardation
312 Moderate mental retardation
313 Severe mental retardation
314 Profound mental retardation
315 Unspecified mental retardation

## VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS (320–389)

Inflammatory diseases of central nervous system (320–324)

320 Meningitis
321 Phlebitis and thrombophlebitis of intracranial venous sinuses

322 Intracranial and intraspinal abscess
323 Encephalitis, myelitis, and encephalomyelitis
324 Late effects of intracranial abscess or pyogenic infection

Hereditary and familial diseases of nervous system (330–333)

330 Hereditary neuromuscular disorders
331 Hereditary diseases of the striatopallidal system
332 Hereditary ataxia
333 Other hereditary and familial diseases of nervous system

Other diseases of central nervous system (340–349)

340 Multiple sclerosis
341 Other demyelinating diseases of central nervous system
342 Paralysis agitans
343 Cerebral spastic infantile paralysis
344 Other cerebral paralysis
345 Epilepsy
346 Migraine
347 Other diseases of brain
348 Motor neurone disease
349 Other diseases of spinal cord

Diseases of nerves and peripheral ganglia (350–358)

350 Facial paralysis
351 Trigeminal neuralgia
352 Brachial neuritis
353 Sciatica
354 Polyneuritis and polyradiculitis
355 Other and unspecified forms of neuralgia and neuritis
356 Other diseases of cranial nerves
357 Other diseases of peripheral nerves except autonomic
358 Diseases of peripheral autonomic nervous system

Inflammatory diseases of the eye (360–369)

360 Conjunctivitis and ophthalmia
361 Blepharitis
362 Hordeolum
363 Keratitis
364 Iritis
365 Choroiditis
366 Other inflammation of uveal tract
367 Inflammation of optic nerve and retina
368 Inflammation of lacrimal glands and ducts
369 Other inflammatory diseases of eye

Other diseases and conditions of eye (370–379)

370 Refractive errors
371 Corneal opacity
372 Pterygium
373 Strabismus
374 Cataract
375 Glaucoma
376 Detachment of retina
377 Other diseases of retina and optic nerve
378 Other diseases of eye
379 Blindness

Diseases of the ear and mastoid process (380–389)

380 Otitis externa
381 Otitis media without mention of mastoiditis
382 Otitis media with mastoiditis
383 Mastoiditis without mention of otitis media
384 Other inflammatory diseases of ear
385 Meniere's disease
386 Otosclerosis
387 Other diseases of ear and mastoid process
388 Deaf mutism
389 Other deafness

## VII. DISEASES OF THE CIRCULATORY SYSTEM (390–458)

### Active rheumatic fever (390–392)

390 Rheumatic fever without mention of heart involvement
391 Rheumatic fever with heart involvement
392 Chorea

### Chronic rheumatic heart disease (393–398)

393 Diseases of pericardium
394 Diseases of mitral valve
395 Diseases of aortic valve
396 Diseases of mitral and aortic valves
397 Diseases of other endocardial structures
398 Other heart disease, specified as rheumatic

### Hypertensive disease (400–404)

400 Malignant hypertension
401 Essential benign hypertension
402 Hypertensive heart disease
403 Hypertensive renal disease
404 Hypertensive heart and renal disease

### Ischemic heart disease (410–414)

410 Acute myocardial infarction
411 Other acute and subacute forms of ischemic heart disease
412 Chronic ischemic heart disease
413 Angina pectoris
414 Asymptomatic ischemic heart disease

### Other forms of heart disease (420–429)

420 Acute pericarditis, nonrheumatic
421 Acute and subacute endocarditis

422 Acute myocarditis
423 Chronic disease of pericardium, nonrheumatic
424 Chronic disease of endocardium
425 Cardiomyopathy
426 Pulmonary heart disease
427 Symptomatic heart disease
428 Other myocardial insufficiency
429 Ill-defined heart disease

**Cerebrovascular disease (430–438)**

430 Subarachnoid hemorrhage
431 Cerebral hemorrhage
432 Occlusion of precerebral arteries
433 Cerebral thrombosis
434 Cerebral embolism
435 Transient cerebral ischemia
436 Acute but ill-defined cerebrovascular disease
437 Generalized ischemic cerebrovascular disease
438 Other and ill-defined cerebrovascular disease

**Diseases of arteries, arterioles, and capillaries (440–448)**

440 Arteriosclerosis
441 Aortic aneurysm (nonsyphilitic)
442 Other aneurysm
443 Other peripheral vascular disease
444 Arterial embolism and thrombosis
445 Gangrene
446 Polyarteritis nodosa and allied conditions
447 Other diseases of arteries and arterioles
448 Diseases of capillaries

**Diseases of veins and lymphatics, and other diseases of circulatory system (450–458)**

450 Pulmonary embolism and infarction
451 Phlebitis and thrombophlebitis

452 Portal vein thrombosis
453 Other venous embolism and thrombosis
454 Varicose veins of lower extremities
455 Hemorrhoids
456 Varicose veins of other sites
457 Noninfective disease of lymphatic channels
458 Other diseases of circulatory system

## VIII. DISEASES OF THE RESPIRATORY SYSTEM (460-519)

### Acute respiratory infections, except influenza (460–466)

460 Acute nasopharyngitis (common cold)
461 Acute sinusitis
462 Acute pharyngitis
463 Acute tonsillitis
464 Acute laryngitis and tracheitis
465 Acute upper respiratory infection of multiple or unspecified sites
466 Acute bronchitis and bronchiolitis

### Influenza (470–474)

470 Influenza, unqualified
471 Influenza with pneumonia
472 Influenza with other respiratory manifestations
473 Influenza with digestive manifestations
474 Influenza with nervous manifestations

### Pneumonia (480–486)

480 Viral pneumonia
481 Pneumococcal pneumonia
482 Other bacterial pneumonia

483 Pneumonia due to other specified organism
484 Acute interstitial pneumonia
485 Bronchopneumonia, unspecified
486 Pneumonia, unspecified

**Bronchitis, emphysema, and asthma (490–493)**

490 Bronchitis, unqualified
491 Chronic bronchitis
492 Emphysema
493 Asthma

**Other diseases of upper respiratory tract (500–508)**

500 Hypertrophy of tonsils and adenoids
501 Peritonsillar abscess
502 Chronic pharyngitis and nasopharyngitis
503 Chronic sinusitis
504 Deflected nasal septum
505 Nasal polyp
506 Chronic laryngitis
507 Hay fever
508 Other diseases of upper respiratory tract

**Other diseases of respiratory system (510–519)**

510 Empyema
511 Pleurisy
512 Spontaneous pneumothorax
513 Abscess of lung
514 Pulmonary congestion and hypostasis
515 Pneumoconiosis due to silica and silicates
516 Other pneumoconioses and related diseases
517 Other chronic interstitial pneumonia
518 Bronchiectasis
519 Other diseases of respiratory system

## IX. DISEASES OF THE DIGESTIVE SYSTEM (520-577)

### Diseases of oral cavity, salivary glands, and jaws (520–529)

520 Disorders of tooth development and eruption
521 Diseases of hard tissues of teeth
522 Diseases of pulp and periapical tissues
523 Periodontal diseases
524 Dento-facial anomalies including malocclusion
525 Other diseases and conditions of the teeth and supporting structures
526 Diseases of the jaws
527 Diseases of the salivary glands
528 Diseases of the oral soft tissues, excluding gingiva and tongue
529 Diseases of the tongue and other oral conditions

### Diseases of esophagus, stomach, and duodenum (530–537)

530 Diseases of esophagus
531 Ulcer of stomach
532 Ulcer of duodenum
533 Peptic ulcer, site unspecified
534 Gastrojejunal ulcer
535 Gastritis and duodenitis
536 Disorders of function of stomach
537 Other diseases of stomach and duodenum

### Appendicitis (540–543)

540 Acute appendicitis
541 Appendicitis, unqualified
542 Other appendicitis
543 Other diseases of appendix

**Hernia of abdominal cavity (550–553)**

550 Inguinal hernia without mention of obstruction
551 Other hernia of abdominal cavity without mention of obstruction
552 Inguinal hernia with obstruction
553 Other hernia of abdominal cavity with obstruction

**Other diseases of intestine and peritoneum (560–569)**

560 Intestinal obstruction without mention of hernia
561 Gastroenteritis and colitis, except ulcerative, of nor infectious origin
562 Diverticula of intestine
563 Chronic enteritis and ulcerative colitis
564 Functional disorders of intestines
565 Anal fissure and fistula
566 Abscess of anal and rectal regions
567 Peritonitis
568 Peritoneal adhesions
569 Other diseases of intestines and peritoneum

**Diseases of liver, gallbladder, and pancreas (570–577)**

570 Acute and subacute necrosis of liver
571 Cirrhosis of liver
572 Suppurative hepatitis and liver abscess
573 Other diseases of liver
574 Cholelithiasis
575 Cholecystitis and cholangitis, without mention of calculus
576 Other diseases of gallbladder and biliary ducts
577 Diseases of pancreas

## X. DISEASES OF THE GENITOURINARY SYSTEM (580-629)

### Nephritis and nephrosis (580–584)

580 Acute nephritis
581 Nephrotic syndrome
582 Chronic nephritis
583 Nephritis, unqualified
584 Renal sclerosis, unqualified

### Other diseases of urinary system (590–599)

590 Infections of kidney
591 Hydronephrosis
592 Calculus of kidney and ureter
593 Other diseases of kidney and ureter
594 Calculus of other parts of urinary system
595 Cystitis
596 Other diseases of bladder
597 Urethritis (nonvenereal)
598 Stricture of urethra
599 Other diseases of urinary tract

### Diseases of male genital organs (600–607)

600 Hyperplasia of prostate
601 Prostatitis
602 Other diseases of prostate
603 Hydrocele
604 Orchitis and epididymitis
605 Redundant prepuce and phimosis
606 Sterility, male
607 Other diseases of male genital organs

Diseases of breast, ovary, fallopian tube, and parametrium (610–616)

610 Chronic cystic disease of breast
611 Other diseases of breast
612 Acute salpingitis and oophoritis
613 Chronic salpingitis and oophoritis
614 Salpingitis and oophoritis, unqualified
615 Other diseases of ovary and fallopian tube
616 Diseases of parametrium and pelvic peritoneum (female)

Diseases of uterus and other female genital organs (620–629)

620 Infective diseases of cervix uteri
621 Other diseases of cervix
622 Infective diseases of uterus (except cervix), vagina, and vulva
623 Uterovaginal prolapse
624 Malposition of uterus
625 Other diseases of uterus
626 Disorders of menstruation
627 Menopausal symptoms
628 Sterility, female
629 Other diseases of female genital organs

## XI. COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM (630–678)

Complications of pregnancy (630–634)

630 Infections of genital tract during pregnancy
631 Ectopic pregnancy
632 Hemorrhage of pregnancy
633 Anemia of pregnancy
634 Other complications of pregnancy

**Urinary infections and toxemias of pregnancy and the puerperium (635–639)**

635 Urinary infections arising during pregnancy and the puerperium
636 Renal disease arising during pregnancy and the puerperium
637 Pre-eclampsia, eclampsia, and toxemia, unspecified
638 Hyperemesis gravidarum
639 Other toxemias of pregnancy and the puerperium

**Abortion (640–645)**

640 Abortion induced for medical indications
641 Abortion induced for other legal indications
642 Abortion induced for other reasons
643 Spontaneous abortion
644 Abortion not specified as induced or spontaneous
645 Other abortion

**Delivery (650–662)**

650 Delivery without mention of complication
651 Delivery complicated by placenta previa or antepartum hemorrhage
652 Delivery complicated by retained placenta
653 Delivery complicated by other postpartum hemorrhage
654 Delivery complicated by abnormality of bony pelvis
655 Delivery complicated by fetopelvic disproportion
656 Delivery complicated by malpresentation of fetus
657 Delivery complicated by prolonged labor of other origin
658 Delivery with laceration of perineum without mention of other laceration
659 Delivery with rupture of uterus
660 Delivery with other obstetrical trauma
661 Delivery with other complications
662 Anesthetic death in uncomplicated delivery

Complications of the puerperium (670–678)

670 Sepsis of childbirth and the puerperium
671 Puerperal phlebitis and thrombosis
672 Pyrexia of unknown origin during the puerperium
673 Puerperal pulmonary embolism
674 Cerebral hemorrhage in the puerperium
675 Puerperal blood dyscrasias
676 Anemia of the puerperium
677 Other and unspecified complications of the puerperium
678 Mastitis and other disorders of lactation

XII. DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE (680–709)

Infections of skin and subcutaneous tissue (680–686)

680 Boil and carbuncle
681 Cellulitis of finger and toe
682 Other cellulitis and abscess
683 Acute lymphadenitis
684 Impetigo
685 Pilonidal cyst
686 Other local infections of skin and subcutaneous tissue

Other inflammatory conditions of skin and subcutaneous tissue (690–698)

690 Seborrheic dermatitis
691 Infantile eczema and related conditions
692 Other eczema and dermatitis
693 Dermatitis herpetiformis
694 Pemphigus
695 Erythematous conditions
696 Psoriasis and similar disorders
697 Lichen
698 Pruritus and related conditions

**Other diseases of skin and subcutaneous tissue (700–709)**

700 Corns and callosities
701 Other hypertrophic and atrophic conditions of skin
702 Other dermatoses
703 Diseases of nail
704 Diseases of hair and hair follicles
705 Diseases of sweat glands
706 Diseases of sebaceous glands
707 Chronic ulcer of skin
708 Urticaria
709 Other diseases of skin

## XIII. DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE (710-738)

**Arthritis and rheumatism, except rheumatic fever (710–718)**

710 Acute arthritis due to pyogenic organisms
711 Acute nonpyogenic arthritis
712 Rheumatoid arthritis and allied conditions
713 Osteoarthritis and allied conditions
714 Other specified forms of arthritis
715 Arthritis, unspecified
716 Polymyositis and dermatomyositis
717 Other nonarticular rheumatism
718 Rheumatism, unspecified

**Osteomyelitis and other diseases of bone and joint (720–729)**

720 Osteomyelitis and periostitis
721 Ostaitis deformans
722 Osteochondrosis
723 Other diseases of bone
724 Internal derangement of joint

725 Displacement of intervertebral disc
726 Affection of sacroiliac joint
727 Ankylosis of joint
728 Vertebrogenic pain syndrome
729 Other diseases of joint

Other diseases of musculoskeletal system (730–738)

730 Bunion
731 Synovitis, bursitis, and tenosynovitis
732 Infective myositis and other inflammatory diseases of tendon and fascia
733 Other diseases of muscle, tendon, and fascia
734 Diffuse diseases of connective tissue
735 Curvature of spine
736 Flat foot
737 Hallux valgus and varus
738 Other deformities

## XIV. CONGENITAL ANOMALIES (740-759)

740 Anencephalus
741 Spina bifida
742 Congenital hydrocephalus
743 Other congenital anomalies of nervous system
744 Congenital anomalies of eye
745 Congenital anomalies of ear, face, and neck
746 Congenital anomalies of heart
747 Other congenital anomalies of circulatory system
748 Congenital anomalies of respiratory system
749 Cleft palate and cleft lip
750 Other congenital anomalies of upper alimentary tract
751 Other congenital anomalies of digestive system
752 Congenital anomalies of genital organs
753 Congenital anomalies of urinary system

754 Clubfoot (congenital)
755 Other congenital anomalies of limbs
756 Other congenital anomalies of musculoskeletal system
757 Congenital anomalies of skin, hair, and nails
758 Other and unspecified congenital anomalies
759 Congenital syndromes affecting multiple systems

## XV. CERTAIN CAUSES OF PERINATAL MORBIDITY AND MORTALITY (760-779)

760 Chronic circulatory and genitourinary diseases in mother
761 Other maternal conditions unrelated to pregnancy
762 Toxemia of pregnancy
763 Maternal ante- and intrapartum infection
764 Difficult labor with abnormality of bones, organs, or tissues of pelvis
765 Difficult labor with disproportion, but no mention of abnormality of pelvis
766 Difficult labor with malposition of fetus
767 Difficult labor with abnormality of forces of labor
768 Difficult labor with other and unspecified complications
769 Other complications of pregnancy and childbirth
770 Conditions of placenta
771 Conditions of umbilical cord
772 Birth injury without mention of cause
773 Termination of pregnancy
774 Hemolytic disease of newborn with kernicterus
775 Hemolytic disease of newborn without mention of kernicterus
776 Anoxic and hypoxic conditions not elsewhere classifiable
777 Immaturity, unqualified
778 Other conditions of fetus or newborn
779 Fetal death of unknown cause

## XVI. SYMPTOMS AND ILL-DEFINED CONDITIONS (780–796)

### Symptoms referable to systems or organs (780–789)

780 Certain symptoms referable to nervous system and special senses
781 Other symptoms referable to nervous system and special senses
782 Symptoms referable to cardiovascular and lymphatic system
783 Symptoms referable to respiratory system
784 Symptoms referable to upper gastrointestinal tract
785 Symptoms referable to abdomen and lower gastrointestinal tract
786 Symptoms referable to genitourinary system
787 Symptoms referable to limbs and joints
788 Other general symptoms
789 Abnormal urinary constituents of unspecified cause

### Senility and ill-defined diseases (790–796)

790 Nervousness and debility
791 Headache
792 Uremia
793 Observation, without need for further medical care
794 Senility without mention of psychosis
795 Sudden death (cause unknown)
796 Other ill-defined and unknown causes of morbidity and mortality

## XVII. ACCIDENTS, POISONINGS, AND VIOLENCE (NATURE OF INJURY) (800–999)

### Fracture of skull, spine, and trunk (800–809)

800 Fracture of vault of skull
801 Fracture of base of skull
802 Fracture of face bones

803 Other and unqualified skull fractures
804 Multiple fractures involving skull or face with other bones
805 Fracture and fracture dislocation of vertebral column without mention of spinal cord lesion
806 Fracture and fracture dislocation of vertebral column with spinal cord lesion
807 Fracture of rib(s), sternum, and larynx
808 Fracture of pelvis
809 Multiple and ill-defined fractures of trunk

**Fracture of upper limb (810–819)**

810 Fracture of clavicle
811 Fracture of scapula
812 Fracture of humerus
813 Fracture of radius and ulna
814 Fracture of carpal bone(s)
815 Fracture of metacarpal bone(s)
816 Fracture of one or more phalanges of hand
817 Multiple fractures of hand bones
818 Other, multiple, and ill-defined fractures of upper limb
819 Multiple fractures both upper limbs, and upper limb with rib(s) and sternum

**Fracture of lower limb (820–829)**

820 Fracture of neck of femur
821 Fracture of other and unspecified parts of femur
822 Fracture of patella
823 Fracture of tibia and fibula
824 Fracture of ankle
825 Fracture of one or more tarsal and metatarsal bones
826 Fracture of one or more phalanges of foot
827 Other, multiple, and ill-defined fractures of lower limb
828 Multiple fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum
829 Fracture of unspecified bones

**Dislocation without fracture (830–839)**

830 Dislocation of jaw
831 Dislocation of shoulder
832 Dislocation of elbow
833 Dislocation of wrist
834 Dislocation of finger
835 Dislocation of hip
836 Dislocation of knee
837 Dislocation of ankle
838 Dislocation of foot
839 Other, multiple, and ill-defined dislocations

**Sprains and strains of joints and adjacent muscles (840–848)**

840 Sprains and strains of shoulder and upper arm
841 Sprains and strains of elbow and forearm
842 Sprains and strains of wrist and hand
843 Sprains and strains of hip and thigh
844 Sprains and strains of knee and leg
845 Sprains and strains of ankle and foot
846 Sprains and strains of sacroiliac region
847 Sprains and strains of other and unspecified parts of back
848 Other and ill-defined sprains and strains

**Intracranial injury (excluding those with skull fracture) (850–854)**

850 Concussion
851 Cerebral laceration and contusion
852 Subarachnoid, subdural, and extradural hemorrhage, following injury (without mention of cerebral laceration or contusion)
853 Other and unspecified intracranial hemorrhage following injury (without mention of cerebral laceration or contusion)
854 Intracranial injury of other and unspecified nature

**Internal injury of chest, abdomen, and pelvis (860–869)**

860 Traumatic pneumothorax and hemothorax
861 Injury to heart and lung
862 Injury to other and unspecified intrathoracic organs
863 Injury to gastrointestinal tract
864 Injury to liver
865 Injury to spleen
866 Injury to kidney
867 Injury to pelvic organs
868 Injury to other and unspecified intra-abdominal organs
869 Internal injury, unspecified, or involving intrathoracic and intra-abdominal organs

**Laceration and open wound of head, neck, and trunk (870–879)**

870 Open wound of eye and orbit
871 Enucleation of eye
872 Open wound of ear
873 Other and unspecified laceration of head
874 Open wound of neck
875 Open wound of chest (wall)
876 Open wound of back
877 Open wound of buttock
878 Open wound of genital organs (external) including traumatic amputation
879 Other, multiple, and unspecified open wounds of head, neck, and trunk

**Laceration and open wound of upper limb (880–887)**

880 Open wound of shoulder and upper arm
881 Open wound of elbow, forearm, and wrist
882 Open wound of hand except finger(s) alone

883 Open wound of finger(s)
884 Multiple and unspecified open wound of upper limb
885 Traumatic amputation of thumb (complete) (partial)
886 Traumatic amputation of other finger(s) (complete) (partial)
887 Traumatic amputation of arm and hand (complete) (partial)

Laceration and open wound of lower limb (890–897)

890 Open wound of hip and thigh
891 Open wound of knee, leg (except thigh), and ankle
892 Open wound of foot, except toe(s) alone
893 Open wound of toe(s)
894 Multiple and unspecified open wound of lower limb
895 Traumatic amputation of toe(s) (complete) (partial)
896 Traumatic amputation of foot (complete) (partial)
897 Traumatic amputation of leg(s) (complete) (partial)

Laceration and open wound of multiple location (900–907)

900 Multiple open wounds of both upper limbs
901 Multiple open wounds of both lower limbs
902 Multiple open wounds of upper with lower limb(s)
903 Multiple open wounds of both hands
904 Multiple open wounds of head with limb(s)
905 Multiple open wounds of trunk with limb(s)
906 Multiple open wounds of face with limb(s)
907 Multiple open wounds of other and unspecified location

Superficial injury (910–918)

910 Superficial injury of face, neck, and scalp
911 Superficial injury of trunk
912 Superficial injury of shoulder and upper arm

913 Superficial injury of elbow, forearm, and wrist
914 Superficial injury of hand(s), except finger(s) alone
915 Superficial injury of finger(s)
916 Superficial injury of hip, thigh, leg, and ankle
917 Superficial injury of foot and toe(s)
918 Superficial injury of other, multiple, and unspecified sites

**Contusion and crushing with intact skin surface (920–929)**

920 Contusion of face, scalp, and neck except eye(s)
921 Contusion of eye and orbit
922 Contusion of trunk
923 Contusion of shoulder and upper arm
924 Contusion of elbow, forearm, and wrist
925 Contusion of hand(s), except finger(s) alone
926 Contusion of finger(s)
927 Contusion of hip, thigh, leg, and ankle
928 Contusion of foot and toe(s)
929 Contusion of other, multiple, and unspecified sites

**Effects of foreign body, entering through orifice (930–939)**

930 Foreign body in eye and adnexa
931 Foreign body in ear
932 Foreign body in nose
933 Foreign body in pharynx and larynx
934 Foreign body in bronchus and lung
935 Foreign body in mouth, esophagus, and stomach
936 Foreign body in intestine and colon
937 Foreign body in anus and rectum
938 Foreign body in digestive system, unspecified
939 Foreign body in genitourinary tract

**Burn (940–949)**

940 Burn confined to eye
941 Burn confined to face, head, and neck
942 Burn confined to trunk
943 Burn confined to upper limb, except wrist and hand
944 Burn confined to wrist(s) and hand(s)
945 Burn confined to lower limb(s)
946 Burn involving face, head, and neck, with limb(s)
947 Burn involving trunk with limb(s)
948 Burn involving face, head, and neck, with trunk and limb(s)
949 Burn involving other and unspecified parts

**Injury to nerves and spinal cord (950–959)**

950 Injury to optic nerve(s)
951 Injury to other cranial nerve(s)
952 Injury to nerve(s) in upper arm
953 Injury to nerve(s) in forearm
954 Injury to nerve(s) in wrist and hand
955 Injury to nerve(s) in thigh
956 Injury to nerve(s) in lower leg
957 Injury to nerve(s) in ankle and foot
958 Spinal cord lesion without evidence of spinal bone injury
959 Other nerve injury including nerve injury in several parts

**Adv .se effect of medicinal agents (960–979)**

960 Adverse effect of antibiotics
961 Adverse effect of other anti-infectives
962 Adverse effect of hormones and synthetic substitutes
963 Adverse effect of primarily systemic agents
964 Adverse effect of agents primarily affecting blood constituents

965 Adverse effect of analgesics and antipyretics
966 Adverse effect of anticonvulsants
967 Adverse effect of other sedatives and hypnotics
968 Adverse effect of other central nervous system depressants
969 Adverse effect of local anesthetics
970 Adverse effect of psychotherapeutics
971 Adverse effect of other central nervous system stimulants
972 Adverse effect of agents primarily affecting the autonomic nervous system
973 Adverse effect of agents primarily affecting cardiovascular system
974 Adverse effect of drugs primarily affecting gastrointestinal system
975 Adverse effect of diuretics
976 Adverse effect of agents acting directly upon musculoskeletal system
977 Adverse effect of other and unspecified drugs
978 Adverse effect of two or more medicinal agents in specified combinations
979 Alcohol in combination with specified medicinal agents

**Toxic effect of substances chiefly nonmedicinal as to source (980–989)**

980 Toxic effect of alcohol
981 Toxic effect of petroleum products
982 Toxic effect of industrial solvents
983 Toxic effect of corrosive aromatics, acids, and caustic alkalis
984 Toxic effect of lead and its compounds (including fumes)
985 Toxic effect of other metals, chiefly nonmedicinal as to source
986 Toxic effect of carbon monoxide
987 Toxic effect of other gases, fumes, or vapors
988 Toxic effect of noxious foodstuffs
989 Toxic effect of other substances chiefly nonmedicinal as to source

Other adverse effects (990–999)

990 Effects of radiation
991 Effects of reduced temperature and excessive dampness
992 Effects of heat
993 Effects of air pressures
994 Effects of other external causes
995 Certain early complications of trauma
996 Injury, other and unspecified
997 Complications peculiar to certain surgical procedures
998 Other complications of surgical procedures
999 Other complications of medical care

## § XVII. ACCIDENTS, POISONINGS, AND VIOLENCE (EXTERNAL CAUSE) (E800–E999)

Railway accidents (E800–E807)

E800 Railway accident involving collision with rolling stock
E801 Railway accident involving collision with other object
E802 Railway accident involving derailment without antecedent collision
E803 Railway accident involving explosion, fire, burning
E804 Fall in, on, or from train
E805 Hit by rolling stock
E806 Other specified railway accident
E807 Railway accident of unspecified nature

Motor vehicle traffic accidents (E810–E819)

E810 Motor vehicle traffic accident involving collision with train
E811 Motor vehicle traffic accident involving collision with street car
E812 Motor vehicle traffic accident involving collision with another motor vehicle

E813 Motor vehicle traffic accident involving collision with other vehicle

E814 Motor vehicle traffic accident involving collision with pedestrian

E815 Other motor vehicle traffic accident involving collision

E816 Noncollision motor vehicle traffic accident due to loss of control

E817 Noncollision motor vehicle traffic accident while boarding or alighting

E818 Other noncollision motor vehicle traffic accident

E819 Motor vehicle traffic accident of unspecified nature

**Motor Vehicle Nontraffic Accidents (E820–E823)**

E820 Motor vehicle nontraffic accident involving collision with moving object

E821 Motor vehicle nontraffic accident involving collision with stationary object

E822 Motor vehicle nontraffic accident while boarding or alighting

E823 Motor vehicle nontraffic accident of other and unspecified nature

**Other road vehicle accidents (E825–E827)**

E825 Street car accident

E826 Pedal cycle accident

E827 Other nonmotor road vehicle accident

**Water transport accidents (E830–E838)**

E830 Accident to watercraft causing submersion

E831 Accident to watercraft causing other injury

E832 Other accidental submersion or drowning in water transport

E833 Fall on stairs or ladders in water transport

E834 Other fall from one level to another in water transport

E835 Other and unspecified fall in water transport

Sliding Fee Scale

0 = Bill at 100% of normal charge
All other values user defined

Special Codes

Recall Codes 0 = No recall specified
1-9 = Defined by user

Off-Site Codes 0 = No off-site facility specified
1-9 = Defined by user

B. INFORMATION FOR DEFINING ACCOUNTS RECEIVABLE CODE VALUES

1. Site Information

This data is collected on Worksheet G/L#3, and is described in Volume I, page I-56.

2. Clinic Information

This information is filled out on Worksheet A/R#1. For each Cost Center the following data items are required:

- Telephone Number (no hyphens, area code optional)
- Federal ID Number (no hyphens, eleven digits)
- Blue Shield Number (no hyphens, eleven digits)
- Medicare Number (no hyphens, eleven digits)
- Group SS Number (no hyphens, nine digits)
- Other ID Number (specify type, eleven digits)
- Other ID Number (specify type, eleven digits)

3. Payment Source Codes

This information is filled out on Worksheet A/R#2. A worksheet must be completed for each cost center (site). The descriptions and Payment Source Code Numbers must be constant across all cost centers, but the other data can change.

- Payment Source Code Number: Values range from 1 to 20, with values 1, 2, and 3 pre-defined (1=Self-Pay; 2=Medicare; 3=Medicaid). Assign the lower numbers to your most common categories of payor.

- Description: Description of payment source (20 characters)

- Claims Form: (Leave blank initially, can be 1-9)